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CONGRESSIONAL BUDGET OFFICE

Reducing the Deficit: Spending and Revenue Options

A Report to the Senate and House Committees on the Budget

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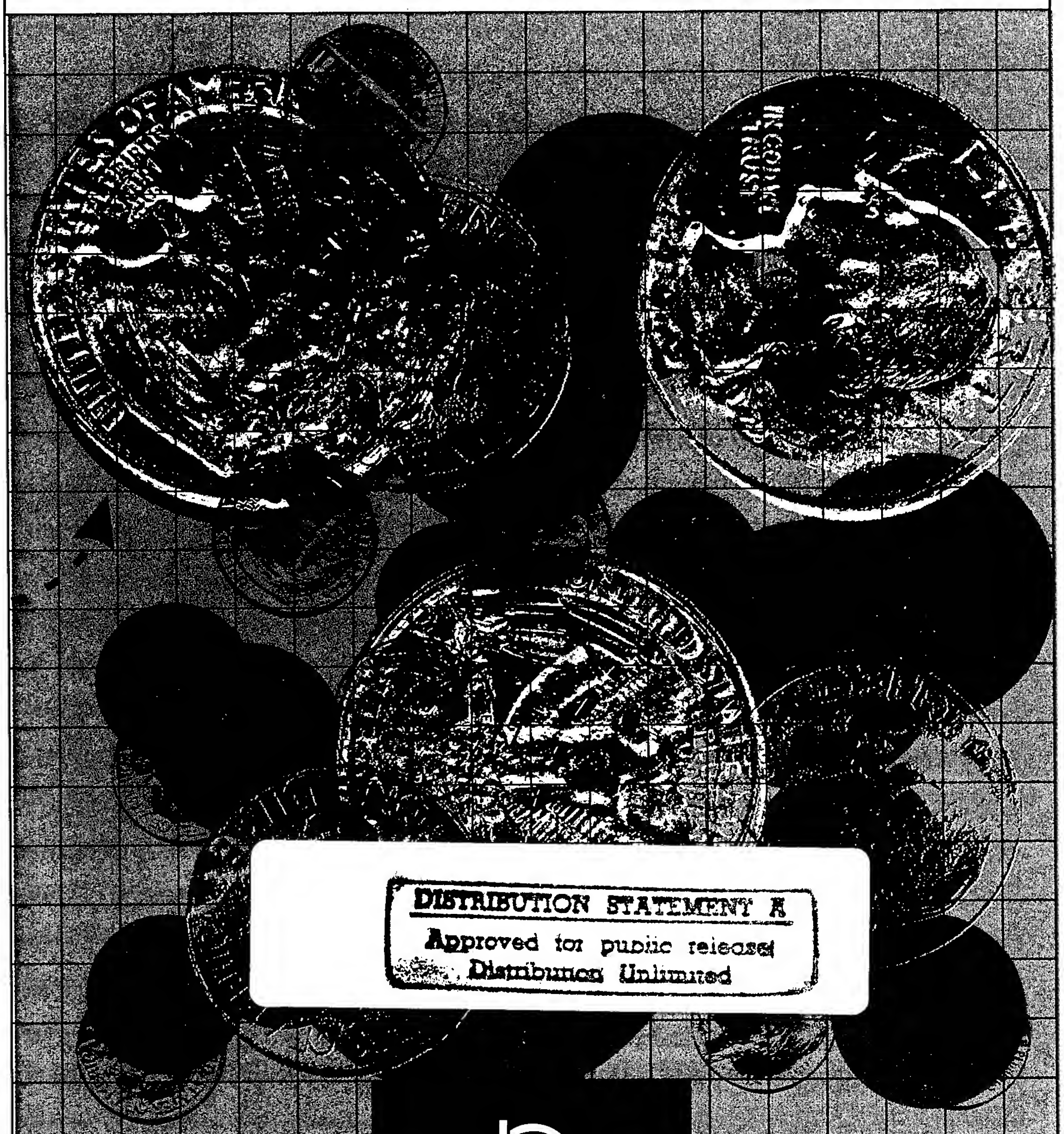

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REDUCING THE DEFICIT: SPENDING AND REVENUE OPTIONS

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NOTES

Unless otherwise indicated, all years referred to in this report are fiscal years.

Numbers in the text and tables of this report may not add to totals because of rounding.

Preface

This volume compiles more than 200 specific policy options for increasing federal revenues or reducing spending in a wide variety of programs. It is the 17th such compendium that the Congressional Budget Office (CBO) has prepared as part of its annual report to the House and Senate Committees on the Budget.

In addition to the introductory chapter and the four chapters that present the options, this year's report has two new features. First, instead of providing a series of individual policy options for reducing the growth of spending for Medicare and Medicaid, Chapter 6 presents several integrated packages of options for those two major federal health care programs. The discussion highlights the trade-offs and interactions that must be considered when combining detailed policies into comprehensive proposals. A second new section--Chapter 7--examines the problems of sustaining Social Security and Medicare over the longer run, beyond the normal budgetary window. It analyzes various policy options for containing spending on those programs as the population ages with the retirement of the baby-boom generation.

The report begins with an introductory chapter that provides general background information on CBO's latest medium-term deficit projections and the longer-run budgetary outlook as the result of coming demographic changes. Chapter 1 also explains how to use the options presented in this volume. The second chapter presents more than 40 revenue-generating options. The next three chapters include more than 160 options for reducing spending, organized by broad categories that have become the focus for deficit reduction efforts--defense and international discretionary spending, domestic discretionary spending, and entitlement and other mandatory spending. The report concludes with the two chapters discussed above, an appendix listing the spending options by the budget functions that would be affected, and a glossary of budget and economic terms.

The policy options included in this report come from many sources, and the Congress has considered most of them at some time in the past. In keeping with CBO's mandate to provide objective and impartial analysis, the discussion of each option presents the cases for and against it as fairly as possible. CBO does not endorse the options included, nor does exclusion of any proposal imply a recommendation for or against it.

All divisions of the Congressional Budget Office contributed to this report, which was coordinated by James L. Blum. Edward Davis prepared Chapter 1. The options presented in Chapters 2 through 5 were coordinated by Mark B. Booth, David H. Moore, R. Mark Musell, Constance Rhind, and R. William Thomas. Joseph R. Antos and Linda Bilheimer prepared Chapter 6, and Sandra Christensen and Ralph E. Smith prepared Chapter 7. Budget authority

and outlay estimates were coordinated by Paul R. Cullinan, Peter H. Fontaine, Michael A. Miller, and Murray N. Ross. The staff of the Joint Committee on Taxation prepared most of the revenue estimates. The longer-term Social Security estimates were made by the Social Security Administration, Office of the Actuary. CBO developed the longer-term Medicare estimates using information provided by the Health Care Financing Administration, Office of the Actuary.

Paul L. Houts and Sherry Snyder supervised the editing and production of the report. Major portions were edited by Paul L. Houts, Sherwood D. Kohn, Leah Mazade, and Sherry Snyder. Christian Spoor provided editorial assistance during production. The authors owe thanks to Cynthia Cleveland, Sharon Corbin-Jallow, Denise Jordan, Angela Z. McCollough, Ronald Moore, L. Rae Roy, and Simone Thomas, who typed the many drafts. Kathryn Quattrone and Jill Sands prepared the report for publication.

June E. O'Neill
Director

August 1996

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Introduction

After declining significantly over the past four years, the deficit is projected to begin a slow but steady ascent. Under current policies and current expectations about the economy, the Congressional Budget Office (CBO) projects that the deficit will creep up from just under 2 percent of gross domestic product (GDP) in 1997 to just over 3 percent of GDP by 2006.[1] Yet projected growth in deficits over the next 10 years is relatively benign. The real trouble begins just beyond that decade.

Beginning about 2010, the first wave of the baby-boom generation reaches retirement age and ushers in an era of unprecedented pressure on federal spending for the Social Security, Medicare, and Medicaid programs. At about the same time, the number of people working and paying taxes to support those and other programs will grow much more slowly. Under current policies, the deficits that those long-term demographic trends suggest would easily dwarf even the largest deficits experienced to date. Indeed, by the middle of the next century, they threaten to drive the federal debt to levels that the economy could not possibly sustain.[2]

During the 104th Congress, concern over the deficit has dominated the budget debate and fueled broad support for a balanced budget. The President and the Congress have expressed their mutual commitment to a balanced budget by 2002, and have promoted budgetary balance by that year as the centerpiece of their most recent budget plans.[3] Yet policymakers continue to disagree over the specific changes in budget laws that are necessary to carry out their common goal of a balanced budget. Moreover, even if policymakers ultimately enact legislation to balance the budget by 2002, the demographic trends that arise after 2010, if not addressed, will undermine efforts to keep the federal debt from burgeoning over the long term.[3]

The Deficit: How Big a Problem?

The Congressional Budget Office projects that the deficit will decline in 1996 for the fourth consecutive year, falling to $144 billion or less from its nominal peak of $290 billion in 1992. However, given current spending and revenue policies and CBO's current assumptions about the economy, 1996 will be the last year of dwindling deficits. In 1997, the baseline deficit will begin to rise slowly and then increase steadily, reaching an estimated $285 billion by 2002 (the year targeted by policymakers for balance) and topping $400 billion by 2006 (see Table 1-1).[4]

1. For a detailed discussion of recent deficit trends, current projections, and related background on federal spending and revenues, see Congressional Budget Office, *The Economic and Budget Outlook: Fiscal Years 1997-2006* (May 1996).

2. For a discussion of these long-term trends and the associated budget outlook, see *The Economic and Budget Outlook*, Chapter 4.

3. See section 203 of the Further Continuing Appropriations Act, 1996 (enacted November 20, 1995); *Budget of the United States Government, Fiscal Year 1997: Budget Supplement* (March 1997), p. 3; and section 406 of H. Con. Res. 178, Concurrent Resolution on the Budget for Fiscal Years 1997 Through 2002 (agreed to June 13, 1996).

4. The baseline is a projection of future spending and revenue levels based on current laws and policies. It is not a prediction of future budget outcomes, but a benchmark from which proposed changes in budget policies can be measured. In general, CBO's baseline projections assume that mandatory spending and revenue laws which typically are permanent, continue without change. Discretionary spending, which is usually provided one year at a time in annual appropriation acts, is adjusted for inflation subject to the statutory discretionary spending limits in effect through 1998.

Table 1-1.
CBO Budget Outlook Under Current-Policy Economic Assumptions with Discretionary Inflation (By fiscal year)

	Actual 1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
						In Billions of Dollars						
Revenues	1,355	1,428	1,483	1,544	1,609	1,681	1,758	1,840	1,931	2,023	2,124	2,232
Outlays												
Discretionary	546	533	546	546	563	579	596	614	632	651	671	691
Mandatory												
Social Security	333	348	365	383	402	422	444	467	490	515	540	567
Medicare and Medicaid[a]	266	292	320	352	384	418	455	495	540	590	645	706
Other mandatory and offsetting receipts	142	160	176	198	208	223	225	238	251	263	279	286
Subtotal	741	800	862	934	994	1,063	1,124	1,200	1,281	1,368	1,465	1,559
Net interest	232	240	246	257	271	283	296	311	328	346	365	385
Total	1,519	1,572	1,654	1,737	1,828	1,925	2,016	2,125	2,242	2,365	2,500	2,636
Deficit	164	144	171	194	219	244	259	285	311	342	376	403
Debt Held by the Public	3,603	3,770	3,967	4,181	4,422	4,687	4,966	5,268	5,593	5,947	6,333	6,746
						As a Percentage of GDP						
Revenues	18.9	19.1	18.9	18.8	18.7	18.6	18.5	18.5	18.5	18.5	18.5	18.5
Outlays												
Discretionary	7.6	7.1	7.0	6.6	6.5	6.4	6.3	6.2	6.1	5.9	5.8	5.7
Mandatory												
Social Security	4.6	4.6	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
Medicare and Medicaid[a]	3.7	3.9	4.1	4.3	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.9
Other mandatory and offsetting receipts	2.0	2.1	2.2	2.4	2.4	2.5	2.4	2.4	2.4	2.4	2.4	2.4
Subtotal	10.3	10.7	11.0	11.4	11.5	11.7	11.8	12.1	12.3	12.5	12.8	12.9
Net interest	3.2	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.2	3.2	3.2
Total	21.2	21.0	21.1	21.1	21.2	21.3	21.3	21.4	21.5	21.6	21.8	21.9
Deficit	2.3	1.9	2.2	2.4	2.5	2.7	2.7	2.9	3.0	3.1	3.3	3.3
Debt Held by the Public	50.2	50.3	50.5	50.8	51.3	51.8	52.3	52.9	53.6	54.3	55.2	56.0

SOURCE: Congressional Budget Office.

a. Excludes Medicare premiums, which are considered offsetting receipts.

When compared as a percentage of GDP with deficits that occurred during much of the 1980s and early 1990s, projected deficits for the next 10 years or so are fairly modest. However, the longer-term prospects for the deficit are not nearly so sanguine and argue against a complacent view of the deficit outlook. As part of its May 1996 report on the economic and budget outlook, CBO analyzed long-term budgetary trends linked to the aging of the postwar baby-boom generation. In developing those long-term projections, CBO employed a broad range of assumptions and different possible conditions.

However, each variation produced the same general conclusion: under current spending and revenue policies, deficits would mount dramatically after 2010. By the middle of the century, deficits and accumulated debt would exceed levels that the economy could reasonably sustain (see Table 1-2).

Failing to reduce deficits significantly over the next few years will cause the federal debt relative to GDP to resume its recent steady rate of ascent. Beginning around 1980, the historic trend of declining federal debt in relation to the size of the economy during periods of peace and prosperity came to an end. Since then, federal debt has nearly doubled as a percentage of the economy, escalating from about 27 percent of GDP in that year to just over 50 percent of GDP in 1995. Although the recent decline in deficits has temporarily stabilized the level of federal debt in relation to the economy, deficits over the next 10 years will swell the debt to 56 percent of GDP, according to CBO projections. By 2030, if discretionary spending grows with the economy, the debt would soar to almost 300 percent of GDP and would rise rapidly in the years thereafter. Such levels of debt could seriously damage the economy and put an end to the upward trend in living standards that the nation has long enjoyed.

Reining in the growth of the deficit is necessary to avoid those economic troubles, and balancing the budget by 2002 is one way to do so. A balanced budget would allow the ratio of debt to GDP to fall gradually over time, thus bolstering the economy for the coming demographic shift as well as putting a significant dent in reducing federal interest payments and debt-service costs. However, unless permanent changes are made to relieve the long-term pressures on the deficit that arise with the aging of the baby-boom generation, simply balancing the budget by 2002 with one-time changes will not prevent the sky-rocketing levels of debt that will occur in the early to middle decades of the next century.

Policymakers must ultimately choose the specific changes that must be made to reduce the deficit or balance the budget. But at least one message based on the current 10-year outlook is absolutely clear: any serious efforts to reduce the deficit significantly will have to include substantial policy changes that go well beyond merely continuing to restrain spending for annually appropriated programs, or so-called discretionary spending.

Annual appropriation acts generally provide and control discretionary spending. Totaling about $530 billion in 1996, discretionary spending accounts for approximately one-third of all federal spending and has been shrinking as a percentage of both the budget and the total economy for the past 30 years. About half of all discretionary spending goes for national defense. The rest of the spending funds federal programs for various domestic and international activities, including housing, agriculture, education, environmental protection, law enforcement, space exploration, research and development, international assistance, general government, and other activities.

Statutory limits on total discretionary spending have been in effect since fiscal year 1991, and those limits have imposed a general freeze on total discretionary spending since 1993.[5] CBO projects that extending a freeze of total discretionary spending at the 1996 level without changing other budget policies

5. The Budget Enforcement Act of 1990 established limits on discretionary spending through 1995. The Omnibus Budget Reconciliation Act of 1993 revised and extended those limits through 1998. The Violent Crime Control and Law Enforcement Act of 1994 established separate discretionary limits for spending from the Violent Crime Reduction Trust Fund. The Office of Management and Budget (OMB) prepares the calculations and estimates used to adjust and enforce those limits. For the current limits as adjusted and a discussion of their enforcement, see the OMB sequestration preview report for fiscal year 1997 in *Budget of the United States Government, Fiscal Year 1997: Analytical Perspectives* (March 1996), pp. 201-208.

Table 1-2.
Projections of Federal Receipts and Expenditures, Calendar Years 1995-2050 (As a percentage of GDP)

	Preliminary 1995[a]	2000	2005	2010	2015	2020	2025	2030	2050
	Discretionary Spending Grows with Inflation After 2006								
NIPA Receipts	20	20	20	20	20	20	20	21	n.c.
NIPA Expenditures									
Federal consumption expenditures	6	6	5	5	4	4	4	4	n.c.
Transfers, grants, and subsidies									
Social Security	5	5	5	5	5	6	7	7	n.c.
Medicare	3	3	4	4	5	6	7	8	n.c.
Medicaid	1	2	2	2	3	3	3	3	n.c.
Other	5	5	4	4	4	4	4	4	n.c.
Net interest	3	3	3	3	4	6	10	20	n.c.
Total	23	22	23	24	26	29	35	47	n.c.
NIPA Deficit	2	3	3	4	6	9	15	26	n.c.
Debt Held by the Public	51	53	57	63	78	104	148	229	n.c.
	Discretionary Spending Grows with the Economy After 2006								
NIPA Receipts	20	20	20	20	20	20	20	21	n.c.
NIPA Expenditures									
Federal consumption expenditures	6	6	5	5	5	5	5	5	n.c.
Transfers, grants, and subsidies									
Social Security	5	5	5	5	5	6	7	8	n.c.
Medicare	3	3	4	4	5	6	7	8	n.c.
Medicaid	1	2	2	2	3	3	3	3	n.c.
Other	5	5	4	4	4	4	4	4	n.c.
Net interest	3	3	3	3	5	7	13	31	n.c.
Total	23	22	23	24	27	31	39	58	n.c.
NIPA Deficit	2	3	3	5	7	11	19	37	n.c.
Debt Held by the Public	51	53	57	65	83	116	174	293	n.c.

SOURCE: Congressional Budget Office.

NOTES: Projections with economic feedbacks allow deficits to push up interest rates and lower the rate of economic growth.

GDP = gross domestic product; NIPA = national income and product account (for background on the definition of NIPA receipts and expenditures, see Congressional Budget Office, *The Economic and Budget Outlook: Fiscal Years 1997-2006*, May 1996, Appendix D); n.c. = not computable (debt would exceed levels that the economy could reasonably support).

a. Consistent with the first official estimate for 1995, published on March 4, 1996.

would still leave a projected deficit in 2002 of about $180 billion under current assumptions about the economy.

As has been well documented in recent years, the growth of entitlements and other mandatory spending programs, particularly health care entitlements, has been a major cause of persistent deficits. Mandatory spending consists mainly of large benefit programs--such as Social Security, Medicare, Medicaid, and federal employee retirement--and of interest payments on the federal debt. Unlike annual appropriations, mandatory spending typically is governed by permanent laws that do not require periodic renewal, that may in some cases establish binding legal commitments on the federal government, and that may also incorporate automatic spending adjustments linked to various indices of rising costs. Consequently, holding down mandatory spending poses a formidable challenge.[6]

Over the past 30 years, mandatory spending has grown inexorably both as a portion of total spending and as a percentage of GDP. If one includes net interest, mandatory spending is estimated to total about $1 trillion in 1996. It now represents about two-thirds of all federal spending and is growing. Over the past decade or so, enacting deficit reduction legislation to reduce mandatory spending, particularly in the Medicare program, has temporarily slowed but not reversed that trend.

A closer look at the sources of mandatory spending growth also reveals another continuing trend: the growth of baseline spending in the two large health care entitlements--Medicare and Medicaid--far outpaces the rate of growth for all other entitlements during this period. In fact, both programs will more than double in size over the next 10 years. Medicare grows from $196 billion in 1996 to $463 billion in 2006, and Medicaid jumps from $96 billion to $243 billion over the same period (see Chapter 6 for a discussion of options for controlling the growth of Medicare and Medicaid over the relative near term).

Nonetheless, even if changes in health care entitlements and other programs are made soon to reduce deficits significantly in the near term, control of deficits over the longer term will not be ensured unless timely changes also are made to address the budgetary effect of long-term demographic trends (see Chapter 7 for a discussion of those issues).

Major Proposals for Balancing the Budget

Over the past year or so, both the President and the Congress have advanced proposals to balance the budget by 2002. Accordingly, their most recent comprehensive budget proposals--the President's 1997 budget (submitted in March 1996) and the Congress's 1997 budget resolution (adopted in June 1996)--recommend policy and other changes aimed at achieving balance in that year.

Both plans take into account the economic effects of a balanced budget. General consensus acknowledges that balancing the budget and keeping it balanced would have certain economic effects that would reduce deficits further. For example, CBO estimates that enacting legislation soon to balance the budget by 2002 would reduce deficits by approximately $250 billion during the 1997-2002 period. Using balanced budget economic assumptions in the budget baseline permits policymakers to take that so-called fiscal dividend into account when fashioning their balanced budget proposals. Moreover, it yields an estimate of the extent of the actual policy changes necessary to reach that balanced budget goal.[7] Using such assumptions, CBO projects that the changes recommended in both the President's 1997 budget and the 1997 budget resolution would result in a balanced budget in 2002.

The two plans are broadly similar in composition, but they differ significantly in some cases over the specific policy changes recommended to reach budgetary balance (see Table 1-3). In a major depar-

6. For a discussion of the issues involved with controlling mandatory spending, see Congressional Budget Office, *Mandatory Spending Control Mechanisms*, CBO Paper (February 1996).

7. For a more detailed discussion of the fiscal dividend of a balanced budget, see Congressional Budget Office, *The Economic and Budget Outlook*, pp. 18-23 and 33.

Table 1-3.
CBO Estimate of the President's 1997 Budget and the 1997 Budget Resolution Under Balanced Budget Assumptions (By fiscal year, in billions of dollars)

	1996	1997	1998	1999	2000	2001	2002	Total, 1996-2002
CBO's April Baseline Deficit[a]	144	165	175	182	191	194	210	n.a.
Baseline Adjustments[b]	2	3	2	1	c	1	1	10
Adjusted Baseline	146	168	177	183	192	195	211	n.a.
President's Basic Budgetary Proposals								
Double-Counting Adjustments[d]	c	-1	c	c	c	c	c	-2
Revenues[e]	1	8	2	3	7	9	9	38
Outlays								
Discretionary								
Freeze[f]	0	-10	-15	-34	-51	-75	-92	-277
Other changes	-2	2	7	6	9	28	54	104
Subtotal	-2	-8	-8	-27	-42	-47	-38	-172
Medicare, Medicaid, and welfare	c	-7	-15	-26	-37	-49	-60	-195
Other mandatory outlays	c	-4	-1	-4	-6	-10	-24	-50
Debt service	c	-1	-1	-3	-7	-11	-17	-40
Total Outlays	-2	-20	-26	-61	-92	-117	-139	-457
Deficit Under the President's Basic Budgetary Proposals as Estimated by CBO	145	156	153	125	106	87	81	n.a.
President's Contingent Budgetary Proposals[g]								
Sunset Tax Relief[e]	0	0	c	c	c	-7	-25	-32
Discretionary Appropriations	0	0	0	0	0	-22	-46	-67
Medicare	0	-1	-1	-2	-2	-3	-3	-13
Other and Debt Service	0	c	c	c	c	-1	-10	-12
Total	0	-1	-2	-2	-2	-33	-84	-124
Deficit Under the President's Contingent Budgetary Proposals as Estimated by CBO	145	155	151	123	104	54	-3	n.a.

Table 1-3.
Continued

	1996	1997	1998	1999	2000	2001	2002	Total, 1996-2002
				1997 Budget Resolution				
Student Loan Adjustments[h]	0	1	1	1	1	1	1	6
Revenues[e]	0	17	18	21	21	20	15	112
Outlays								
Discretionary								
Freeze[f]	0	-10	-15	-34	-51	-75	-92	-277
Additional reductions	0	-1	-6	-5	-3	-5	-8	-29
Subtotal	0	-11	-21	-39	-54	-80	-100	-306
Medicare, Medicaid, and welfare	0	-9	-21	-37	-52	-69	-95	-282
Other mandatory outlays	0	-10	-6	-9	-12	-12	-14	-62
Debt service	0	c	-2	-4	-8	-14	-23	-50
Total Outlays	0	-31	-49	-88	-125	-175	-232	-700
Deficit Under the 1997 Budget Resolution	146	155	146	117	88	41	-5	n.a.

SOURCE: Congressional Budget Office.

NOTE: n.a. = not applicable.

a. This baseline is based on economic projections that assume the budget will be balanced by 2002. It assumes that discretionary spending is equal to 1996 appropriations adjusted for inflation up to the caps that are in effect through 1998. General-purpose discretionary spending is equal to the cap in 1998 and grows from that level at the rate of inflation after that.

b. Baseline adjustments reflect enactment of the Omnibus Consolidated Rescissions and Appropriations Act of 1996 (OCRA), and a revision of projected spending for the renewal of assisted-housing contracts as they expire.

c. Less than $500 million.

d. Double-counting adjustments account for proposals in the President's budget that were enacted in OCRA.

e. In this table, minus signs mean a reduction in the deficit. Thus, revenue losses are shown with a positive sign because they increase the deficit.

f. Savings from freezing discretionary spending at 1996 levels throughout the projection period.

g. The President proposes certain additional budgetary changes to achieve a balanced budget by 2002 under CBO's economic and technical assumptions.

h. Student loan adjustments reflect setting the accounting for administrative costs of direct and guaranteed student loans on an equal footing.

ture from the deficit reduction measures established in 1990 and 1993, each plan relies principally on spending cuts to shrink the deficit instead of proposing a combination of spending cuts and tax increases (see Box 1-1). In fact, each plan recommends that net revenues be reduced through 2002 ($38 billion under the President's plan and $112 billion under the budget resolution).

Both plans recommend major reductions in total discretionary spending from inflation-adjusted levels. The President's budget proposes reducing about $240 billion (including contingent amounts) in total discretionary spending from 1996 through 2002 (just under half of the recommended net deficit reduction). Alternatively, the Congressional budget resolution recommends cutting about $300 billion in discretionary spending during the period (just over half of the net deficit reduction).

In recent years, significant reductions in defense discretionary accounts have been enacted to hold total discretionary spending under the statutory limits. Neither the President's budget nor the budget resolution calls for continued reductions in defense spending at the rate experienced in recent years. In fact, the budget resolution establishes separate defense and nondefense discretionary spending limits for 1997 and 1998. In addition, under both plans, over half of the recommended reduction in total discretionary spending is slated for just two years--2001 and 2002--if, as CBO projects, contingent reductions in discretionary spending recommended by the President prove necessary.

Large cuts in mandatory spending make up the bulk of the remaining deficit reduction recommended in each plan. Moreover, most of the savings in mandatory spending under each plan come from reductions in Medicare and Medicaid and through welfare reform. Unlike recommended discretionary spending, which will be provided in annual appropriation acts enacted in the future, recommended mandatory spending in later years would result from changes in permanent laws enacted this year. However, both the President and the Congress have proposed changes in those programs that are highly contentious and have proved to be a major hurdle to agreement on balanced budget legislation.

Each plan proposes to reach a balanced budget in multiple steps. The President's budget includes contingent spending cuts and revenue increases, most of them triggered after 2000, if the actual deficit in that year is higher than estimated or if certain policy changes do not yield the anticipated savings. CBO estimates that a contingent deficit reduction of $124 billion under the President's plan will be necessary if the budget is to be balanced by 2002. Alternatively, the Congressional budget resolution calls for its recommendations for mandatory spending and revenues

Box 1.
A Look at Recent Efforts to Reduce the Deficit

The recent decline in the deficit stems largely from the enactment of deficit reduction legislation in 1990 and 1993 and, since 1992, from sustained economic growth.

The Omnibus Budget Reconciliation Acts of 1990 and 1993 each reduced baseline deficits by some $400 billion to $500 billion during overlapping five-year periods (covering 1991 through 1998). They followed a similar, two-step approach for reducing deficits. First, they revised current laws directly to reduce mandatory spending and increase revenues from baseline levels. Second, they set forth budget enforcement procedures to limit future spending or revenue legislation. Discretionary spending limits were established to constrain annual appropriations (generally below inflation-adjusted levels), and a pay-as-you-go requirement was set up to prevent enacting new mandatory spending or revenue legislation that would increase the deficit.

Spending and revenue measures enacted since 1991 have been consistent with those budget enforcement requirements. Since 1992, sustained economic growth, with relatively low levels of inflation and unemployment, has also contributed significantly to an improved deficit picture. However, even continued adherence to the current budget enforcement procedures, along with sustained economic growth at projected levels, is not expected to hold down future deficits without further policy changes.

to be carried out in up to three separate reconciliation measures.[8]

Of course, the approaches represented in those plans are not the only alternatives, and the options listed in later chapters of this volume can be used to devise other plans to reduce the deficit or balance the budget. However, over the course of the past year, and most recently during Congressional action on the 1997 budget resolution, majorities in the House and Senate have rejected other major alternatives in favor of those two general approaches. For example, both the House and Senate rejected alternatives that would balance the budget with smaller spending reductions but without any of the proposed tax cuts. Similarly, they have rejected other proposals that would increase net revenues as part of an overall plan to balance the budget.

The failure of the President and the Congress to reach agreement on balanced budget legislation despite their expressed mutual commitment testifies to the difficult choices that must be made to reach that goal. However, the magnitude of the deficit problem facing policymakers through 2002 and immediately thereafter is relatively less significant than what they will confront over the longer term. Should policymakers fail to reach agreement on further measures to reduce the deficit in the near term, the long-term problems will be even tougher to resolve.

How to Use This Report

This volume is intended to assist policymakers as they continue to grapple with the difficult choices that must be made to reduce the deficit, balance the budget, and address long-term budgetary trends. The remaining chapters of the volume discuss options for increasing revenues or cutting spending to reduce the deficit. Chapters 2 through 5 list specific policy changes that may be made to reduce deficits over the six-year period ending in 2002. Chapter 6 discusses broad policy options and integrated approaches for limiting the growth of Medicare and Medicaid through 2002. Chapter 7 addresses issues raised by the long-term demographic changes from the aging of the baby-boom generation and discusses certain broad options for dealing with the budgetary pressures linked to those trends.

Options presented in this volume stem from various sources, including Presidential budget proposals, legislative proposals, previous versions of this volume, CBO staff, other government entities, and private groups. The options are intended to reflect a broad range of possibilities but are not necessarily comprehensive. Moreover, including or excluding a specific option does not represent an endorsement or rejection of that option by CBO.

Chapter 2 presents options for raising revenues. Specific options for reducing spending are listed in Chapters 3 through 5. Chapters 3 and 4 list options for reducing discretionary spending--defense and international programs are covered in Chapter 3 and domestic programs in Chapter 4. Chapter 5 deals with entitlement and mandatory programs other than Medicare and Medicaid, including user fees.

For each option in Chapters 2 through 5, this volume presents the pros and cons of the proposal, along with estimates of the effect that it would have on the deficit between fiscal years 1997 and 2002. For each revenue or mandatory spending option in Chapters 2 and 5, projected savings are computed from baseline levels estimated to occur under current law. For each discretionary spending option in Chapters 3 and 4, the volume presents two sets of estimates--the first shows how much the proposal would save if baseline spending was adjusted for inflation consistent with the current statutory limits, and the second calculates how much it would save from a baseline assuming that discretionary spending was frozen at the 1996 level until 2002. For defense discretionary options, savings also have been computed relative to the Administration's 1996 defense plan, adjusted for final action in the 1996 appropriation act.

The final two chapters of the volume discuss broad options for curtailing the growth in Medicare and Medicaid in the near term (Chapter 6) and for

8. Under the Congressional Budget Act, so-called reconciliation instructions may be included in a budget resolution directing committees to conform mandatory spending or revenue laws in their jurisdiction to budget resolution recommendations. The Congress considers the resulting reconciliation legislation under expedited procedures.

addressing the trends that affect Social Security and Medicare in the long term (Chapter 7). A separate chapter is dedicated to Medicare and Medicaid because the size and growth of those two programs continue to outpace all other entitlements and are two of the principal factors that sustain deficits in the near term. Indeed, one cannot effectively address the magnitude of the trends affecting those programs without a comprehensive approach. Thus, instead of listing specific policy options within the chapter on entitlements and other mandatory spending, Chapter 6 discusses integrated packages and other broad approaches for dealing with those trends.

Similarly, a separate chapter is devoted to long-term budgetary problems that will arise when the baby-boom generation begins to retire. The policy changes that will be needed to deal with those problems include more fundamental reforms that might take longer to carry out. Consequently, Chapter 7 addresses major issues and various options for dealing with long-term trends in a comprehensive fashion.

Some Specific Uses for the Options

The options presented in this volume could be used for several purposes. Given the expressed commitment of the President and the Congress to a balanced budget by 2002, the options could be used to devise comprehensive alternatives for reaching that goal. For that reason, CBO has estimated the savings for each option for the 1997-2002 period and has calculated projected savings using a budget baseline that assumes the economic effects of reaching a balanced budget by 2002.

What is needed to balance the budget by 2002? Using balanced budget economic assumptions, CBO estimates that policy changes that reduce deficits by about $650 billion from 1997 through 2002 would be necessary (see Table 1-4). That estimate assumes that total discretionary spending is adjusted for inflation subject to the current statutory limits in effect through 1998.

Freezing discretionary spending at the 1996 level through 2002 (an assumption roughly comparable to the discretionary spending recommendations under the President's contingent budget and the budget resolution) would save about $275 billion over that period, and would reduce the savings needed from other policy changes to about $380 billion. Readers choosing the path of freezing total discretionary spending as a starting point for developing a comprehensive balanced budget plan must be careful to calculate the savings for individual discretionary options from the unadjusted 1996 level listed for each option. Otherwise, discretionary savings should be calculated using the inflation-adjusted estimates.

The options included in this volume have other possible uses. For example, one could employ the options as offsets for spending increases or tax cuts to comply with current requirements for budget enforcement. Users who wish to pursue options for that purpose, however, should be aware that the Budget Enforcement Act of 1990 (BEA) created separate budget enforcement requirements for discretionary spending and for mandatory spending and revenue legislation. Total discretionary spending may not exceed specified limits through 1998. Mandatory spending and revenue legislation falls under the pay-as-you-go requirement that generally prohibits such new legislation from increasing the deficit--excluding Social Security, which is covered by different procedures.

Thus, to ensure credit for savings under current procedures for budget enforcement (short of preparing a comprehensive balanced budget plan), discretionary options should be combined with other discretionary proposals, and mandatory spending and revenue options should be combined with other such options. Although combining options from different budget enforcement categories would not necessarily affect the estimated savings, such savings may not be counted for budget enforcement purposes or may be counted in a way that differs from the intended effect.

Table 1-4.
Illustrative Deficit Reduction Path (By fiscal year, in billions of dollars)

	1996	1997	1998	1999	2000	2001	2002	Total, 1997-2002
CBO's April Baseline Deficit with Discretionary Inflation[a]	144	165	175	182	191	194	210	n.a.
Baseline Adjustments[b]	2	3	2	1	c	1	1	8
Adjusted Baseline	146	168	177	183	192	195	211	n.a.
Freeze Discretionary Spending[d]								
Discretionary reduction	0	-10	-15	-34	-50	-75	-92	-276
Debt service	0	c	-1	-2	-4	-7	-12	-27
Total Deficit Reduction	0	-11	-16	-36	-55	-82	-104	-303
CBO's Adjusted Baseline with Discretionary Freeze	146	158	161	148	137	113	107	n.a.
Additional Deficit Reduction								
Policy changes[e]	0	-25	-45	-60	-75	-85	-90	-380
Debt service	0	-1	-3	-5	-9	-13	-17	-47
Total Deficit Reduction	0	-26	-48	-65	-84	-98	-107	-427
Resulting Deficit	146	132	113	82	53	15	0	n.a.
Total Change from Adjusted Baseline with Discretionary Inflation								
Policy changes	0	-35	-60	-94	-125	-160	-182	-656
Debt service	0	-1	-4	-7	-13	-20	-29	-74
Total Deficit Reduction	0	-36	-64	-101	-138	-180	-211	-730

SOURCE: Congressional Budget Office.

NOTE: n.a. = not applicable.

a. This baseline is based on economic projections that assume the budget will be balanced by 2002. It assumes that discretionary spending is equal to 1996 appropriations adjusted for inflation up to the caps that are in effect through 1998. General-purpose discretionary spending is equal to the cap in 1998 and grows from that level at the rate of inflation after that.

b. The baseline is adjusted for legislation (primarily the Omnibus Consolidated Rescissions and Appropriations Act of 1996) enacted after the April baseline was completed, a correction in subsidized housing projections, and debt service on those adjustments.

c. Less than $500 million.

d. Assumes that appropriations for 1997 through 2002 are frozen at the dollar level provided in 1996.

e. These changes represent only one of a large number of possible paths that would lead to a balanced budget. The exact path depends on when deficit reduction begins and the specific policies adopted by the Congress and the President. The path illustrated in this table is not based on any specific policy assumptions.

Other General Caveats in Using This Volume

Users of *Reducing the Deficit* should note several other caveats. First, although all of the options devoted to deficit reduction would shave federal interest costs, those savings are not included in the calculations accompanying the individual options. Ordinarily, when CBO receives a detailed budgetary plan, it assesses the savings for each option as in this volume and then computes the additional interest savings (shown as debt service in the illustrative paths in Table 1-4 on page 11). When such budget packages are put together, one can adjust for any interactions among the parts that would raise or lower the savings--something that cannot be done for the individual options discussed in this volume. Also, although employing economic assumptions under a balanced budget would have an impact on overall projections of interest rates and economic growth, it would only affect estimates of specific savings for those few options (particularly certain revenue options) that are most sensitive to fluctuations in interest rates.

Second, if used for deficit reduction, many of the options in this volume would in isolation reduce employment temporarily. That particular drawback is not noted in each discussion.

Third, all of the proposals to reduce grants to state and local governments would make the financial status of those governments worse, and that effect is also not repeated in each discussion. Further, some of the options affecting states and localities may involve federal mandates. The Unfunded Mandates Reform Act of 1995 establishes procedures for controlling such mandates and requires CBO to estimate the costs to states and localities of any mandates imposed by new legislation that the Congress is considering. Individual options do not include estimates of any potential mandates. However, they may discuss related issues where appropriate.

Fourth, as noted earlier, some options may not be scored as meeting the Budget Enforcement Act's requirements, even though the options would reduce the deficit. The BEA created separate enforcement mechanisms for discretionary spending, revenues and other mandatory spending, and Social Security. For example, reducing Social Security spending would lower the deficit but would not count under the BEA. It would not enter either the discretionary or pay-as-you-go calculations since the BEA gave Social Security its own limiting rule. Generally, if the savings cannot be counted under the BEA, that caveat is noted in the discussions of individual options.

Fifth, "credit" is not given in the savings estimates for sales of government assets, such as buildings or land. Although government assets are sold from time to time, such sales generally cannot be counted to determine compliance either with discretionary spending limits or with pay-as-you-go procedures. For that reason, CBO has not included any proposals in this volume for which the sale of assets constitutes the only savings. That choice was made mainly because the proceeds from such sales cannot be scored under current budget law; thus, no judgment is implied concerning the desirability of selling government assets. In fact, asset sales may be useful for other purposes, such as part of an overall effort to privatize certain federal functions or activities. In his last two budgets, the President has recommended changing the budgetary treatment of asset sales so that they may be counted under the BEA. Although the 1996 and 1997 budget resolutions have directed that such sales be counted in the Congressional budget process, that directive does not affect the budgetary treatment of such sales under the BEA's statutory enforcement procedures.

Finally, subsequent CBO cost estimates, which generally are required to accompany any bill reported by a Congressional committee, may not exactly match the numbers shown in this report. The reason is that the policy proposals on which the cost estimates are based may not precisely match the specifications used in developing the options in this volume. Furthermore, future estimates may be compared with baselines that differ from the one used for the estimates that follow in this volume.

Chapter Two

Revenues

Revenues are one side of the federal budget equation. In 1995, federal revenues were $1.36 trillion compared with outlays of $1.52 trillion. With no change in current policies governing taxes, the Congressional Budget Office expects that revenues will grow to $1.43 trillion in 1996 and to $1.84 trillion by 2002 (see Table 2-1).

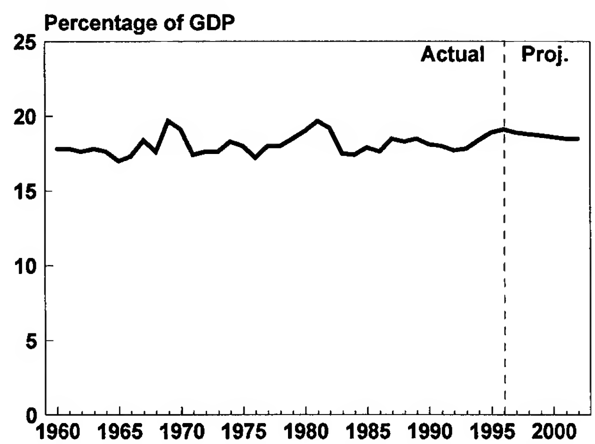
Over 90 percent of federal revenues come from income and payroll taxes. In 1995, the individual income tax alone raised 44 percent of federal revenue. Social insurance payroll taxes raised 36 percent, and the corporate income tax raised 12 percent. Excise taxes raised an additional 4 percent of federal revenue, and the rest came from estate and gift taxes, customs duties, and fees and other miscellaneous receipts.

Federal revenues claimed just under 19 percent of gross domestic product in 1995. If the Congress enacts no new legislation affecting revenues, the Congressional Budget Office expects the revenue share of gross domestic product (GDP) to decline gradually after 1996, reaching 18.5 percent of GDP in 2001 and maintaining that share through 2002.

Trends and International Comparisons

The federal revenue share of GDP has dropped as low as 17 percent and risen almost as high as 20 percent since 1960 (see Figure 2-1). The revenue share reached its peak in 1969, when the Congress enacted an income tax surcharge during the Vietnam War, and again in 1981 after several years of rapid inflation pushed taxpayers' incomes into higher tax brackets ("bracket creep"). Large personal and corporate tax reductions enacted in the Economic Recovery Tax Act of 1981, combined with back-to-back recessions in 1980 and 1981-1982, brought the revenue share down to well under 18 percent in 1983 and 1984. In subsequent years, the revenue share rose above 18 percent before falling below that level as a result of the 1990-1991 recession and the slow recovery that followed, which more than offset the tax increases enacted in the Omnibus Budget Reconciliation Act of 1990. The revenue share rebounded in 1994 as the economy improved and the tax increases enacted in the Omnibus Budget Reconciliation Act of

Figure 2-1.
Total Revenues as a Share of GDP



SOURCE: Congressional Budget Office.

1993 took effect. At close to 19 percent of GDP, the revenue share in 1995 was in the high end of its range since 1960.

Important shifts have occurred over the last 35 years in the composition of revenues (see Figure 2-2). Individual income taxes--the largest component of total revenues--have fluctuated between about 7 percent and 9½ percent of GDP since 1960. At 8.2 percent of GDP in 1995, the individual income tax share is currently just about equal to its average level for the 1960-1995 period. The individual income tax share of GDP rose sharply in the 1979-1982 period when rapid inflation led to bracket creep that pushed up revenues, peaking at 9.4 percent of GDP in 1981. Since the early 1980s, the individual income tax share has stayed well below 9 percent. Barring any new legislation affecting revenues, CBO expects that individual income tax revenues will claim about 8.5 percent of GDP a year through 2002.

The GDP share claimed by corporate income taxes fell between 1960 and the mid-1980s because of both a drop in corporate profits as a share of GDP and legislated reductions in tax liability. The share averaged just below 4 percent in the 1960s, just be-

Table 2-1.
CBO Projections for Revenues Under Current-Policy Economic Assumptions (By fiscal year)

	Actual 1995	1996	1997	1998	1999	2000	2001	2002
				In Billions of Dollars				
Individual Income Taxes	590	636	661	694	730	769	811	853
Corporate Income Taxes	157	169	171	172	171	171	174	179
Social Insurance Taxes	484	504	531	553	580	609	636	666
Excise Taxes	57	52	51	52	53	53	54	55
Estate and Gift Taxes	15	16	17	18	19	20	21	22
Customs Duties	19	20	20	21	21	22	23	25
Miscellaneous	32	30	32	34	35	37	39	41
Total	1,355	1,428	1,483	1,544	1,609	1,681	1,758	1,840
On-budget	1,004	1,063	1,098	1,142	1,186	1,236	1,294	1,354
Off-budget[a]	351	365	385	402	423	444	464	486
				As a Percentage of GDP				
Individual Income Taxes	8.2	8.5	8.4	8.4	8.5	8.5	8.5	8.6
Corporate Income Taxes	2.2	2.3	2.2	2.1	2.0	1.9	1.8	1.8
Social Insurance Taxes	6.7	6.7	6.8	6.7	6.7	6.7	6.7	6.7
Excise Taxes	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.5
Estate and Gift Taxes	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Customs Duties	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3
Miscellaneous	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Total	18.9	19.1	18.9	18.8	18.7	18.6	18.5	18.5
On-budget	14.0	14.2	14.0	13.9	13.8	13.7	13.6	13.6
Off-budget[a]	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9

SOURCE: Congressional Budget Office.

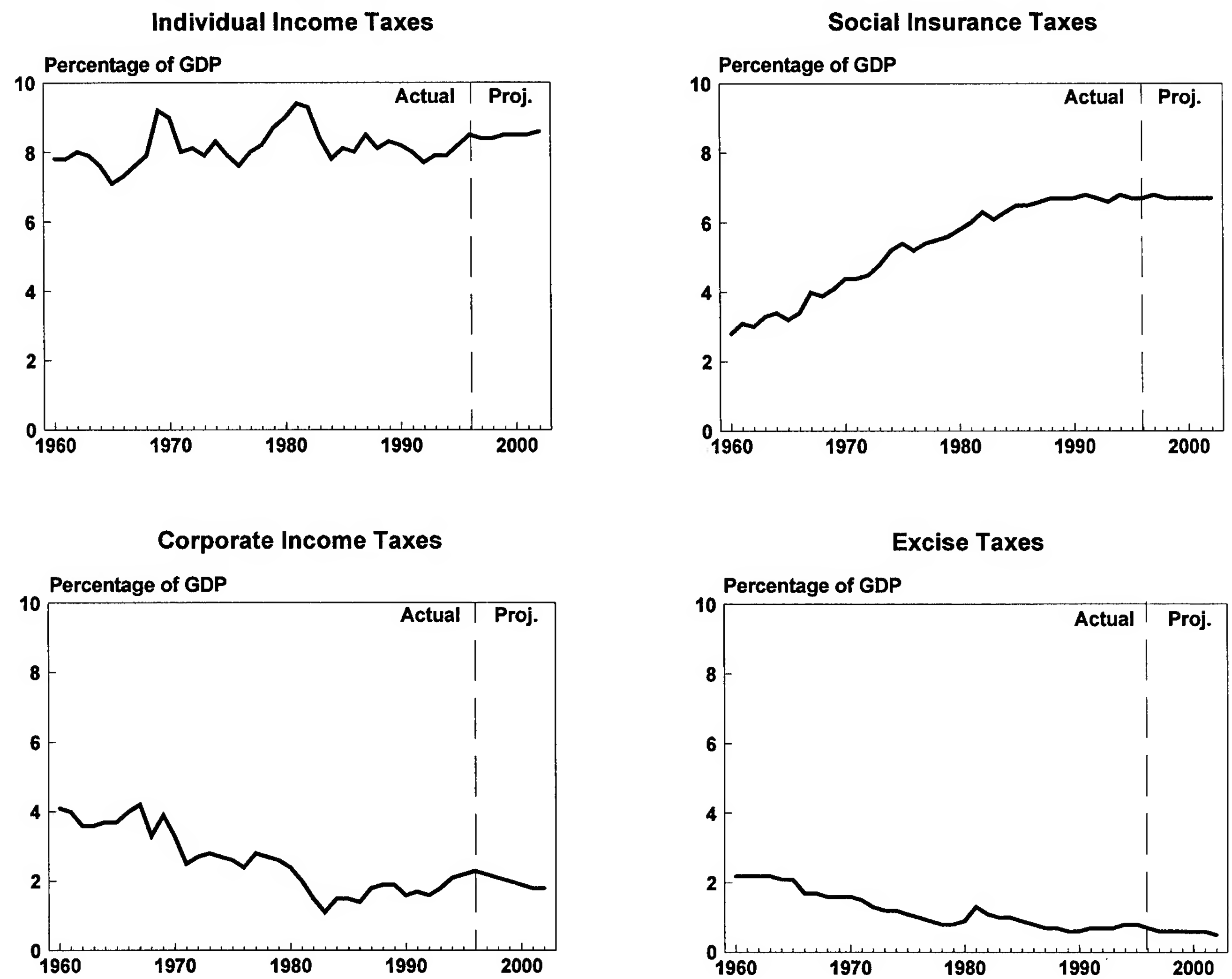
a. Social Security.

low 3 percent in the 1970s and just below 2 percent in the 1980s. Corporate taxes as a share of GDP have grown slightly since the Congress raised corporate taxes in the Tax Reform Act of 1986. CBO expects that the revenue share of corporate taxes will average 2 percent of GDP from 1996 through 2002.

The share of GDP claimed by social insurance taxes (mostly the Social Security payroll tax) increased steadily between 1960 and the late 1980s as tax rates, coverage, and the share of wages subject to taxation all grew. The share swelled from just under 3 percent of GDP in 1960 to nearly 7 percent by 1988, about where it is today. Social insurance tax revenues were equal to about one-fourth of combined individual and corporate income tax revenues in 1960, about one-half of combined income tax revenues in 1980, and about 65 percent today.

Excise taxes are a small share of total federal revenues. Excises have claimed a decreasing share of GDP over time largely because most are levied on

Figure 2-2.
Revenues by Source as a Share of GDP

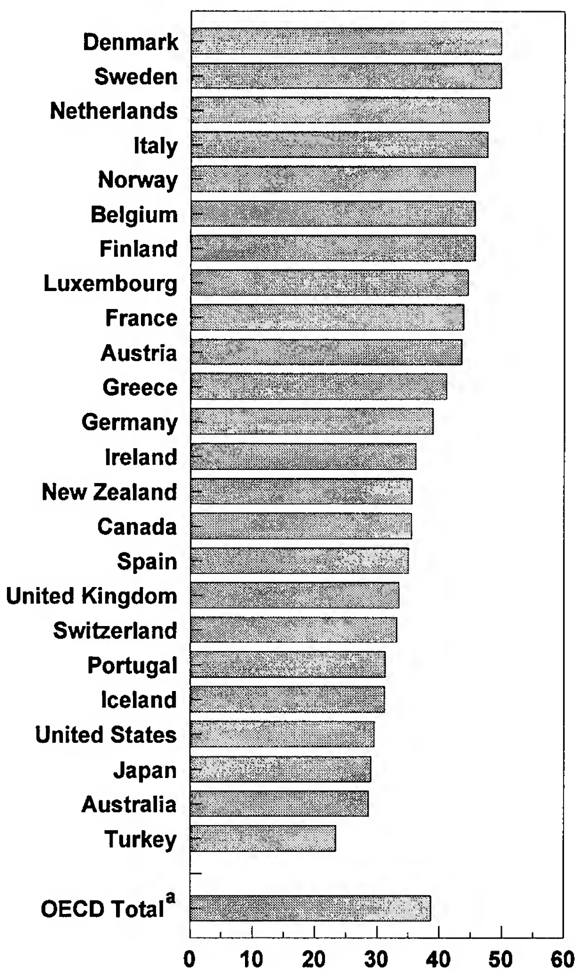


SOURCE: Congressional Budget Office.

the quantity--not the value--of goods, and in general rates have not gone up enough to keep pace with inflation.

Taxes at all levels of government--federal, state, and local--claimed nearly 30 percent of GDP in 1993. By way of comparison, the tax share of GDP for member countries of the Organization for Economic Cooperation and Development (OECD)--comprising most of the major industrialized, market-economy countries in the world--averaged about 40 percent in 1993 (see Figure 2-3).

Figure 2-3.
Total Tax Revenues as a Percentage of GDP, 1993



SOURCE: Organization for Economic Cooperation and Development.

a. Unweighted average.

The composition of tax revenues in the United States is quite different from that in most OECD member countries. The most significant difference is the greater reliance on taxes on goods and services in most other countries, particularly general consumption taxes such as the value-added tax (VAT). Australia and the United States are the only OECD countries without a VAT, although Australia does levy a general consumption tax in the form of a sales tax at the wholesale level. The United States has no general consumption tax at the federal level, but 45 states and the District of Columbia have a general sales tax.

General consumption taxes at all levels of government accounted for less than 8 percent of total tax revenues in the United States in 1993, compared with 17 percent of total tax revenue in OECD member countries (see Figure 2-4). The percentage of revenues raised by general consumption taxes in the United States was lower than in any other member country except Japan. All taxes on goods and services, which include specific excise taxes as well as general consumption taxes, were about 17 percent of total tax revenues in the United States, compared with an average of 30 percent in OECD member countries.

Revenue-Raising Options

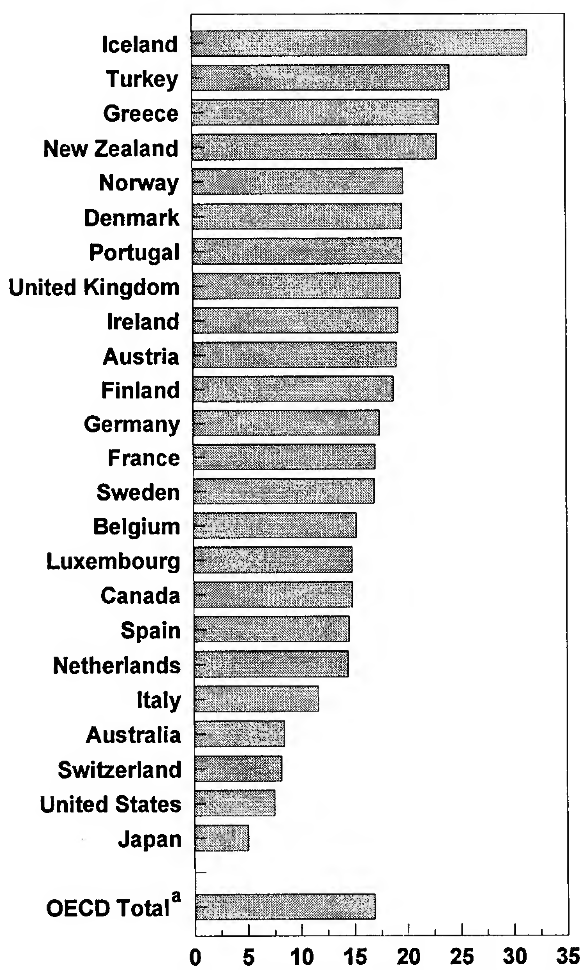
This chapter presents a broad range of options for increasing federal revenue. The options would raise revenue from all of the major revenue sources. They differ in the way they would affect the allocation of economic resources among alternative uses and the distribution of tax burdens among taxpayers.

The estimates assume that taxpayers would change their behavior in a variety of ways in response to tax increases. For example, higher taxes on alcohol or tobacco would lead to reduced consumption of those goods, whereas higher income tax rates would lead to a shift in income from taxable to nontaxable form, deferral of income, and greater use of deductions. The estimates do not assume any feedback to the macroeconomy from, for example, changes in investment or hours of work. Most op-

tions would probably not affect economic activity enough to be noticed in the $7 trillion U.S. economy. Broad-reaching options such as introducing a federal value-added tax could have economywide effects over time, but the size and timing of those effects are highly uncertain.

Options for raising revenues would appear to be headed against both the Administration and Congressional tide of revenue-reducing proposals introduced in the past year. However, the Congress may wish to consider certain revenue-raising options as part of a plan to achieve a balanced budget. First, relying on spending cuts alone would require larger cuts in outlays than if some revenue-raising proposals were included as part of a balanced budget proposal. Second, many options would raise revenue by eliminating or curtailing certain preferences in the tax code. Those steps would not only achieve deficit reduction but also reduce the complexity of the tax code and provide more even-handed treatment of taxpayers. Third, revenues from removing preferences could be used to finance other, more neutral tax reductions or could substitute for cutbacks in spending programs supporting the same or related activities.

Figure 2-4.
Taxes on General Consumption as a Percentage of Total Taxation, 1993



SOURCE: Organization for Economic Cooperation and Development.

a. Unweighted average.

This chapter presents a number of options that would reduce current tax preferences. They include restricting itemized deductions and credits under the income tax (REV-04 through REV-08), restricting the tax-favored treatment of certain types of household income (REV-12 through REV-17), and curtailing income tax preferences for businesses (REV-26 through REV-36). Some of those options have been introduced in the past year as part of legislation that would balance the budget by 2002.

Some Members of Congress seek more dramatic changes in the way the federal government raises revenues that go beyond changing features of the current tax structure or removing certain preferences in the current code. Those changes include a full or partial replacement of income taxes with a general consumption tax in the interests of increasing national saving and reducing the complexity of the tax system. Whether such a major restructuring will eventually be put in place depends on how well an actual consumption tax would produce those advantages, while meeting other important criteria such as revenue capacity and equity among taxpayers.

Clearly, such a change would constitute a radical overhaul of the nation's tax laws, affecting revenue collection not only at the federal level but at the state and local level as well. It would go far beyond the experience of all OECD countries, which retain a significant portion of their revenues from income and payroll taxes while relying much more heavily than the United States on general consumption taxes as a source of revenue.

This volume does not address comprehensive tax reform. Such a complex change requires more than a few page of analysis, and most proposals for comprehensive tax reform seek to maintain revenue neutrality rather than an increase in revenues. Certain options presented here, however, would increase the share of revenues collected from consumption-based taxes. For example, REV-37 would impose a value-added tax, whereas REV-38 would add a broad-based tax on energy. Both options assume that the current income tax system would remain in place.

The options differ in their implications for the cost of administration by the Internal Revenue Service and the cost of compliance by taxpayers. Some would raise revenue from existing tax sources by increasing tax rates, broadening tax bases, or expanding tax coverage to include additional taxpayers. The government could put many of those options into place quickly and easily because the taxes are already in operation. Other options that would raise revenue from new tax sources, such as the federal value-added tax or broad-based energy tax, could impose substantial added compliance costs on taxpayers and administrative costs on the federal government because they would require additional tax computation methods and more Internal Revenue Service employees.

Certain options, such as REV-09, the first part of REV-18, and REV-19, would impose new mandates on state and local governments in their role as employers. Almost all of the options would impose mandates on the private sector. The Unfunded Mandates Reform Act of 1995 requires that CBO provide estimates of intergovernmental and private-sector mandates for new legislation. (The act exempts Social Security taxes.) The act imposes procedural hurdles on Congressional consideration of any legislative proposal that contains unfunded intergovernmental mandates in excess of $50 million for any of the first five years.

One revenue-raising option--to make all entitlement payments subject to the individual income tax--appears not in this chapter but in Chapter 5, which discusses entitlement payments and other mandatory spending. That option is part of ENT-49, which would apply a means test to federal entitlement payments.

Although most of the spending options presented in this volume would take effect on October 1, 1996, all but one of the revenue options would take effect on January 1, 1997. The VAT option has a later effective date because putting the tax in place would take more time. The revenue estimates for the options, most of which the Joint Committee on Taxation prepared, may differ from estimates for similar provisions in actual tax legislation because of differences in effective dates, transition rules, and technical details.

REV-01 RAISE MARGINAL TAX RATES FOR INDIVIDUALS AND CORPORATIONS

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Individuals							
Raise Marginal Tax Rates to 16 Percent, 30 Percent, 33 Percent, 38 Percent, and 42 Percent, and the Top AMT Rate to 30 Percent	23.6	40.6	42.4	44.4	46.5	48.2	245.7
Raise the Top Marginal Tax Rates to 38 Percent and 42 Percent	3.8	6.2	6.3	6.6	6.8	6.7	36.4
Corporations							
Raise the Top Marginal Tax Rate to 36 Percent	1.9	3.8	3.9	4.0	4.1	4.2	21.9
Raise the AMT Rate to 25 Percent	2.2	4.1	3.6	3.2	2.9	2.7	18.7

SOURCE: Joint Committee on Taxation.

NOTE: AMT = alternative minimum tax.

Rate increases have some administrative advantages over other types of tax increases because they require relatively minor changes to the current tax collection system. But rate increases have drawbacks as well. Higher tax rates can reduce incentives to work and save. They also encourage taxpayers to shift income from taxable to nontaxable forms (such as substituting tax-exempt bonds for other investments or tax-free fringe benefits for cash compensation) and to increase spending on tax-deductible items such as home mortgage interest and charitable contributions. In those ways, higher tax rates may cause a less efficient use of economic resources.

Individuals. Under current law, five explicit marginal tax rates apply to taxable income: 15 percent, 28 percent, 31 percent, 36 percent, and 39.6 percent. (The marginal tax rate is the percentage of an extra dollar of income that a taxpayer must pay in taxes.) The maximum marginal tax rate on capital gains income is 28 percent. Some taxpayers face effective marginal rates higher than the top rate of 39.6 percent because of provisions that phase out their itemized deductions and personal exemptions. (See Table 2-2 for the levels of taxable income at which the marginal rates apply for 1996.)

Increasing all marginal tax rates on ordinary income to 16 percent, 30 percent, 33 percent, 38 percent, and 42 percent (approximately a 7 percent increase) would raise almost $250 billion in 1997 through 2002. This option would also increase the top marginal tax rate under the alternative minimum tax (AMT) to 30 percent in order to keep the rate

aligned with regular tax rates and avoid a major shift of payments between the AMT and regular tax. The AMT is now imposed on individuals at rates of 26 percent and 28 percent on an income base broader than the regular tax. Individuals pay the larger of the AMT or the regular tax. Under this option, families with tax credits would face a somewhat larger percentage increase in their tax liabilities than other taxpayers, and families whose earned income tax credit gives them a tax refund might have to pay tax. (This option and the next one assume that the maximum rate on capital gains would remain at 28 percent.)

Another option is to increase only the top two marginal tax rates. Increasing the current 36 percent rate to 38 percent and the 39.6 percent rate to 42 percent would raise revenues by about $36 billion in 1997 through 2002. For 1997, this option would increase taxes for married couples with taxable income of more than $151,700 and single filers with taxable income of more than $124,600. The change would affect just over 1 percent of tax filers.

The estimates assume that taxpayers will change their behavior in a variety of ways if marginal tax rates are raised, chiefly by shifting income from taxable to nontaxable or tax-deferred forms. The estimates do not assume any change in total hours worked. Increasing all marginal tax rates may have little effect on hours worked because of offsetting incentives. Since higher tax rates reduce the returns from working (each hour of work produces less take-home pay), workers may be unwilling to work the same number of hours as before. But since higher tax rates also reduce after-tax income, taxpayers may wish to work more in order to maintain the same level of disposable income.

Increasing only the top two marginal tax rates might have a greater potential effect on hours of work. Taxpayers with taxable income just above the level at which the new rates would apply would see little reduction in their after-tax income, but they would experience a decrease in the return from working additional hours. As a result, in addition to the types of behavioral changes assumed in the estimates, they might cut back on hours of work, which would reduce some of the revenue pickup from the increase in rates.

Corporations. The tax rate for corporations is 15 percent on taxable income up to $50,000, 25 percent on income from $50,000 to $75,000, 34 percent on income from $75,000 to $10 million, and 35 percent on income above $10 million. The tax benefit from the 15 percent, 25 percent, and 34 percent rates is recaptured for corporations by an additional 5 percent tax that is levied on taxable income between $100,000 and $335,000 and a 3 percent additional tax on income between $15 million and $18.3 million (see REV-03).

Corporations also face the alternative minimum tax, which limits their use of tax preferences. When computing taxable income for the alternative minimum tax, taxpayers may not make certain adjustments that are otherwise allowed in computing regular taxable income. Those adjustments are of two types: deferral preferences, such as accelerated depreciation, excess intangible drilling costs, and profit or loss from long-term contracts; and exclusion preferences, such as some tax-exempt interest and percentage depletion. As with individuals, corporations must pay the larger of the regular tax or the AMT and can use one year's AMT as a credit against regular tax liability in future years. (Individuals can only use as credits the portion of the AMT that arises from deferral preferences.) Thus, a portion of the revenue

Table 2-2.
Individual Income Tax Brackets, 1996 (In dollars)

Taxable Income for Single Filers	Marginal Tax Rate (Percent)	Taxable Income for Married Couples
0 to 24,000	15.0	0 to 40,100
24,001 to 58,150	28.0	40,101 to 96,900
58,151 to 121,300	31.0	96,901 to 147,700
121,301 to 263,750	36.0	147,701 to 263,750
263,751 and Over	39.6	263,751 and Over

SOURCE: Internal Revenue Service.

NOTE: Separate schedules apply for single taxpayers who file a head-of-household return or married taxpayers who file separate returns.

gain from a higher AMT rate would result from a shift of some future tax liabilities to earlier years.

Increasing the top marginal rate for corporations to 36 percent would raise about $22 billion in 1997 through 2002. Out of approximately 1 million corporations that have positive corporate tax liabilities each year, only about 3,500 pay income taxes at the top rate and would be affected by this option. Nonetheless, those firms earn approximately 80 percent of all corporate taxable income. The change would not, however, affect corporations that always pay the AMT. Moreover, those corporations paying the regular tax, but with unused credits, could offset some of the tax increase.

Boosting the corporate AMT rate to 25 percent would raise about $4 billion in 1998 but decreasing amounts thereafter because the revenue raised represents a shift of future liabilities to earlier years, as described earlier. Proponents of the corporate AMT argue that it improves the perceived fairness of the tax system because it largely ensures that corporations reporting profits to shareholders pay the corporate tax. Critics maintain, however, that the corporate AMT places a greater tax burden on rapidly growing and heavily leveraged corporations and increases incentives to engage in tax-motivated transactions. For example, a firm that expects to pay the AMT may be able to reduce its tax by leasing its equipment rather than owning the equipment and using the accelerated depreciation tax preference. In addition, critics point to evidence that suggests the costs to businesses of complying with the AMT are large relative to the revenue raised. Responding to such criticisms, the Congress adopted AMT relief in the vetoed Balanced Budget Act of 1995 by no longer treating accelerated depreciation for future investment as a taxable preference and by providing greater use of AMT credits.

Relationship Between Top Rates Affects Business Form. Changes in the difference between the top corporate and individual tax rates affect the form of organization a business chooses. Owners of corporate businesses pay the corporate income tax on their business income and the individual income tax if they distribute that income as dividends. Owners of noncorporate businesses pay tax only at the individual level but on total business income. At present, the top individual tax rate is above the corporate tax rate, making it relatively more advantageous for businesses that retain their earnings to choose the corporate form. Subsequent changes in that relationship would alter the incentives that businesses face when they choose their organizational form.

REV-02 AMEND OR REPEAL THE INDEXING OF INCOME TAX SCHEDULES

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Suspend Indexing for 1997 (Except for the earned income tax credit)	6.6	9.5	10.9	11.6	10.4	11.6	60.6
Repeal Indexing (Except for the earned income tax credit)	6.6	16.4	28.2	41.3	53.9	68.2	214.6

SOURCE: Joint Committee on Taxation.

To offset the effects of inflation, current law each year indexes the standard deduction, the personal exemption, the minimum and maximum dollar amounts for each tax rate bracket, the thresholds for the phase-out of personal exemptions, the limit on itemized deductions, and the earned income tax credit (EITC). A repeal of indexing (except for the EITC), beginning in 1997, would raise revenues by about $215 billion from 1997 through 2002, if the annual rate of inflation averages 3 percent over the period, as the Congressional Budget Office projects. Revenues from the repeal would grow rapidly as the effect of repeal cumulated over time. Suspending indexing only for 1997 would raise about $60 billion over the six-year period.

An alternative to suspending or repealing indexing is to index by something less than the full annual increase in the consumer price index (CPI) that applies under current law. If the CPI tends to overstate the increase in the cost of living, as some evidence suggests, then indexing by less than the full CPI increase would be appropriate. Indexing by 0.5 percentage points less than the estimated increase in the CPI would raise revenues and reduce EITC outlays by about $40 billion over the 1997-2002 period.

Repealing or suspending indexing would not burden all taxpayers equally. Among families with the same income, the tax increase would be smaller for taxpayers who itemize than for those who use the standard deduction, and for families without children than for families with children (and more personal exemptions). As long as the EITC continued to be indexed, low-income families would have a smaller percentage drop in after-tax income than other families because they have little or no taxable income. The percentage drop in after-tax income would also be small for families with the highest incomes because they receive no benefit from the personal exemption, and most of them do not take the standard deduction. A general rate increase would allocate additional taxes more equally among families with the same income than repealing or suspending indexing would (see REV-01).

Another reason for retaining indexing is that it prevents unlegislated tax increases. Without indexing, inflation would cause the average income tax rate to increase without any legislative action.

REV-03 TAX ALL CORPORATE INCOME AT A 35 PERCENT RATE

	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Revenues	1.8	3.5	3.5	3.6	3.7	3.7	19.8

SOURCE: Joint Committee on Taxation.

Under current law, corporations pay a 35 percent statutory tax rate on their taxable income in excess of $10 million. Income below that amount is subject to tax at reduced rates of 15 percent, 25 percent, and 34 percent. Eliminating the reduced corporate rates and taxing all corporate income at the single 35 percent rate would raise an estimated $19.8 billion from 1997 through 2002.

Firms with taxable income below $75,000 have tax rates of 15 percent or 25 percent. Firms with taxable income between $75,000 and $10 million have a tax rate of 34 percent, and those with income above $10 million have a 35 percent rate. Compared with a single 35 percent statutory rate, corporations with taxable income between $10 million and $15 million pay $100,000 less in taxes--the maximum benefit from the lower rates.

The tax benefit from the reduced rates is phased out for corporations with income above certain amounts by an additional 5 percent tax that is levied on corporate taxable income between $100,000 and $335,000 and a 3 percent additional tax on income between $15 million and $18.3 million. As a result, corporations with income of more than $18.3 million pay an average rate of 35 percent and receive no benefit from the reduced rates.

The Congress enacted the reduced rates to provide tax relief to small and moderate-sized businesses. Of the approximately 1 million corporations that have positive corporate tax liabilities each year, only about 3,500 do not qualify for reduced rates, although they earn about 80 percent of total corporate profits. Reduced rates not only provide a competitive advantage to some small and moderate-sized businesses, but other taxpayers benefit as well. For example, high-income individuals can benefit because the provision allows them to shelter income as retained earnings in a small corporation. Tax law does not allow owners of personal service corporations--such as physicians, attorneys, and consultants--to incorporate themselves in order to gain the tax benefit. Other high-income individuals still use those opportunities for tax shelters, however. The Omnibus Budget Reconciliation Act of 1993 increased the incentive to use those shelters by raising the top statutory tax rate on income for individuals to nearly 40 percent, while raising the top statutory rate for corporations to 35 percent. Additional unintended recipients of the tax benefit from reduced rates are large businesses with low profits. Furthermore, some of those large corporations may be able to control the timing of certain income and expenses in order to generate low taxable income--and the tax benefit--in certain years.

The reduced corporate rates do lessen the "double taxation" of corporate income. Owners of corporate businesses pay corporate tax on all of the earnings of the business and also pay individual tax on the part of their earnings that they receive as dividends. Owners of noncorporate businesses, however, pay tax at only the individual level on all earnings.

Lower corporate rates are not the only means of reducing the double tax on the income of those businesses. As an alternative to incorporation, many businesses--especially small ones--could operate as sole proprietorships or partnerships and pay tax only under the individual income tax. In addition, many small businesses could continue to enjoy the advantages of incorporation by operating as S corporations, which must have 35 or fewer owners and satisfy other requirements. Shareholders in S corporations also pay under the individual income tax only.

REV-04 ELIMINATE OR LIMIT DEDUCTIONS FOR MORTGAGE INTEREST

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Eliminate Mortgage Interest Deductions	31.2	42.6	43.9	45.4	47.0	48.7	258.8
Reduce Maximum Mortgage Principal Eligible for Interest Deductions to $300,000	1.6	2.2	2.3	2.4	2.6	2.7	13.8
Limit Deductions to $12,000 per Return (Single) or $20,000 (Joint)	2.3	3.2	3.4	3.6	3.8	4.0	20.3
Limit Deductions for Second Homes	0.5	0.7	0.7	0.7	0.8	0.8	4.2

SOURCE: Joint Committee on Taxation.

A home is both the largest consumer purchase and the main investment for most Americans. The tax code has historically treated homes more favorably than other investments. Current law allows homeowners to deduct mortgage interest expenses, even though homes do not produce taxable income, and exempts most capital gains from home sales (see REV-23).

Preferential treatment for home ownership encourages people to become homeowners and to purchase larger homes. Increasing home ownership may contribute to social and political stability by strengthening people's stake in their communities and governments. In addition, such preferential treatment may stabilize neighborhoods by encouraging longer-term residence and home improvement. The amount of preference, however, is probably larger than needed to maintain a high rate of home ownership. For example, Canada, which grants preferential tax treatment to capital gains from home sales but does not allow deductions for mortgage interest, has achieved about the same rate of home ownership as the United States.

A disadvantage of providing preferential tax treatment for investment in home ownership is that it reduces the amount of savings available for investment in taxable business enterprises. That shift may contribute to a relatively low rate of investment in business assets in the United States compared with other developed countries that do not allow such large mortgage interest deductions. In recent years, one-third to one-half of net private investment has gone into owner-occupied housing. Consequently, even a modest reduction in investment in owner-occupied housing could raise investment significantly in other sectors.

Limiting mortgage interest deductions would reduce the preferential treatment of home ownership for those owners who must borrow to purchase their homes. Under current law, taxpayers may deduct interest on up to $1 million of debt that they have incurred to acquire and improve first and second homes. They may also deduct interest on up to $100,000 of other loans they have secured with a home (home-equity loans), regardless of purpose. No other type of consumer interest is deductible. Current law also limits the extent to which interest deductions for carrying assets other than first and second homes can exceed income from such assets.

The limits under current law on mortgage interest deductions result in a generous subsidy even for relatively expensive homes. Moreover, taxpayers with substantial home equity can circumvent the limits on consumer and investment interest deductions by using, for example, home-equity loans with deductible interest to finance automobiles and other consumer purchases or investment in assets other than homes. In contrast, renters and people with less home equity cannot use that method to deduct interest on the loans they use to finance auto and other purchases.

Eliminate Interest Deductions. Eliminating the deductibility of mortgage interest would raise the taxes of about 30 million homeowners by an average of almost $1,400 in 1997 and increase tax revenues by about $260 billion over the 1997-2002 period. Home ownership as an investment would lose some of its tax advantage compared with other investment opportunities, thus reducing the incentive to overinvest in housing. Furthermore, eliminating the deduction would remove the opportunity for homeowners to circumvent provisions in the tax law that deny the deductibility of interest on other types of consumer expenditures. Alternatively, eliminating the mortgage interest deduction would increase net mortgage payments sharply for current homeowners, potentially making it impossible for some to afford their homes. Eliminating the mortgage interest deduction would also cause the value of higher-priced homes to fall and would hurt homebuilders. Finally, the higher tax burden would fall most heavily on people who itemize deductions but do not have sufficient wealth to purchase homes without mortgages.

Reduce the Principal Eligible for Deduction. Lowering the limit on the amount of principal eligible for the mortgage interest deduction from $1 million to $300,000 would reduce deductions for about half a million taxpayers with large mortgages and increase revenues by about $14 billion over the 1997-2002 period. That change would reduce the deduction only for owners of relatively expensive homes. It would not affect the vast majority of homeowners. The fraction affected would be greatest in high-cost areas such as Honolulu and San Francisco. Because the proposal would not index the limits for inflation, the real value would gradually decline. Phasing down the limit gradually would cushion the effects on most current homeowners and the home-building industry.

Cap Interest Deductions. Capping the mortgage interest deduction would have effects similar to limiting the principal eligible for deduction. One difference is that fluctuating interest rates would affect deductions subject to the interest cap but would not affect deductions subject to the limit on mortgage principal. Capping the mortgage interest deduction at $12,000 per single return, $20,000 per joint return, and $10,000 per return for married couples who file separately would raise about $20 billion in revenues in 1997 through 2002. Those limits are much higher than the deductions most taxpayers claim. Of the 27 million taxpayers who claimed the mortgage interest deduction in 1993, about 1.2 million (4 percent) had deductions that exceeded those limits; the average deduction for home mortgage interest was about $6,900. At an 8 percent interest rate, the proposed $20,000 cap would allow full interest deductions on new fixed-rate mortgages as large as about $250,000. Only 4 percent of new mortgages originated in 1995 exceeded that amount.

Like the other limits on interest deductions, the cap would be more restrictive in areas with higher housing costs. Further, in periods of high interest rates, the limits would affect recent home buyers and those with adjustable-rate mortgages more than longer-term owners with fixed-rate mortgages.

Limit Interest Deductions for Second Homes. A final option is to limit deductibility only to interest on debt that taxpayers incur to acquire and improve a primary residence, plus $100,000 of other debt secured by that home. That approach would require interest deductions for second homes to qualify under the $100,000 limit on home-equity loans. The proposal would increase revenue by $4.2 billion in 1997 through 2002.

Permitting taxpayers to deduct the interest from mortgages on second homes--many of which are vacation homes--may seem inequitable when taxpayers cannot deduct interest from consumer loans used to finance education, medical expenses, and other consumer purchases. However, limiting the deduction of mortgage interest to a single home would retain the present deduction for taxpayers with high mortgage interest on a costly primary home while partially denying it for other taxpayers with equal combined mortgage interest on two less costly homes.

REV-05 ELIMINATE OR LIMIT DEDUCTIONS OF STATE AND LOCAL TAXES

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Eliminate Deduction of State and Local Taxes	18.4	45.9	48.2	50.7	53.2	55.7	272.1
Limit Deductions to the Excess over 1 Percent of Adjusted Gross Income	2.1	7.2	7.5	7.9	8.3	8.7	41.7
Prohibit Deductibility of Taxes Above Ceiling of 8 Percent of Adjusted Gross Income	2.2	7.1	7.5	7.9	8.3	8.6	41.6

SOURCE: Joint Committee on Taxation.

In determining their taxable income, taxpayers may claim a standard deduction or itemize and deduct from their adjusted gross income (AGI) certain specific expenses, including state and local income, real estate, and personal property taxes. For taxpayers who itemize, those deductions provide a federal subsidy of state and local tax payments. That subsidy may cause itemizers to support higher levels of state and local services than they would otherwise; consequently, the deductions indirectly finance increased state and local government spending at the expense of other uses of federal revenues.

The Tax Reform Act of 1986 reduced the subsidy to state and local governments directly by repealing the deduction for state and local sales taxes, and indirectly by increasing the standard deduction and lowering marginal rates. The latter changes reduced both the number of itemizers and the value of the deductions. The Omnibus Budget Reconciliation Act of 1993 raised marginal tax rates for higher-income households and thus indirectly increased the value of the deductions.

As a way to assist state and local governments, deductibility of state and local taxes has several disadvantages. First, the deductions reduce federal tax liability only for itemizers. Second, because the value of an additional dollar of deductions increases with the marginal tax rate, the deductions are worth more to higher-bracket taxpayers. Third, deductibility favors wealthier communities. Communities with higher average income levels have more residents who itemize and are therefore more likely to spend more because of deductibility than lower-income communities. Fourth, deductibility may discourage states and localities from financing services with nondeductible user fees, thereby discouraging efficient pricing of some services.

An argument against restricting deductibility is that a taxpayer with a large state and local tax liability has less ability to pay federal taxes than one with equal total income and a smaller state and local tax bill. In some areas, a taxpayer who pays higher state and local taxes may receive more benefits from publicly provided services, such as recreational facilities. In that case, the taxes are more like payments for other goods and services (for example, private recreation) that are not deductible. Alternatively, higher public expenditures resulting from deductibility benefit all members of a community, including lower-income nonitemizers who do not receive a direct tax saving.

Eliminating or limiting the value of the state and local deduction could raise significant revenues. Eliminating deductibility would raise almost $275

billion in 1997 through 2002. An alternative option would allow deductions only for state and local tax payments above a fixed percentage of AGI. A 1 percent floor on deductions would increase revenues in 1997 through 2002 by about $42 billion. Another alternative would be to prohibit deductions above a fixed ceiling, which also might be a percentage of AGI. A ceiling set at 8 percent of AGI would increase revenues by about the same amount--$42 billion in 1997 through 2002. A floor and a ceiling, however, would have very different effects on incentives for state and local spending. A floor would retain the incentive for increased spending, but a ceiling would reduce it.

REV-06 ELIMINATE OR LIMIT DEDUCTIONS FOR CHARITABLE GIVING

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Eliminate Deductions for Charitable Giving	2.9	19.3	20.2	21.2	22.2	23.3	109.1
Limit Deductions for Appreciated Property to Its Tax Basis	0.2	1.4	1.5	1.5	1.6	1.7	7.9
Limit Deductions to the Excess over 2 Percent of Adjusted Gross Income	1.4	9.2	9.7	10.2	10.8	11.3	52.6

SOURCE: Joint Committee on Taxation.

Under current law, taxpayers who itemize deductions can deduct the value of contributions they make to qualifying charitable organizations. The amount of deductions cannot exceed 50 percent of adjusted gross income in any year. In 1993, 30 million taxpayers claimed $68 billion of deductions for charitable contributions, reducing federal revenues by about $17 billion. In addition to cash donations, taxpayers can deduct the fair market value of a contribution of appreciated property that they have held for more than 12 months, regardless of how much they paid for the property.

Eliminating the deductibility of charitable contributions would increase tax revenues by about $3 billion in 1997 and by $109 billion over the 1997-2002 period. In 1997, it would increase tax liabilities of roughly 30 million taxpayers by an average of about $600 per return, most of which would be paid in fiscal year 1998.

The deduction provides significant government support for charitable activities. But one criticism of the deduction is that the electorate as a whole, and not individual donors, should make decisions about which activities deserve taxpayer support. Another criticism is that the deduction provides unequal federal matching rates for contributions by different taxpayers. The government subsidy rates can approach 40 percent of contributions for the highest-income taxpayers, but are only 15 percent for taxpayers in the lowest tax bracket and zero for people who do not itemize deductions.

Nonetheless, the decisions of individuals about donations may be the best measure of which activities should receive government support and yield substantial contributions. Without deductibility, contributions would drop. However, the magnitude of the decline is uncertain.

Alternatively, limiting the deduction of appreciated property to a taxpayer's cost of an asset under the regular income tax would increase revenues by about $0.2 billion in 1997 and by nearly $8 billion over six years. The existing provision allows taxpayers to deduct the entire value of assets they contributed even though they paid no tax on the gain from appreciation. That outcome provides preferential treatment to one kind of donation relative to other kinds and expands the preferential treatment of capital gains (see REV-24). Indisputably, however, the present provision encourages people to donate appreciated assets to eligible activities rather than passing them on to their heirs at death, when any gains also escape income tax.

Yet another way to limit the charitable deduction, while retaining an incentive for giving, is to allow taxpayers to deduct only those contributions in ex-

cess of 2 percent of adjusted gross income. That alternative would retain an incentive for increased giving by people who donate a large share of their income but would remove the incentive for smaller contributors. It would completely disqualify the charitable deductions of roughly 20 million taxpayers in 1997 and reduce allowed deductions for roughly another 15 million, increasing revenues by about $1.4 billion in 1997 and by about $53 billion over the 1997-2002 period. Such a change would eliminate the tax incentive for slightly more than 50 percent of the taxpayers who currently make and deduct charitable contributions. In addition, it would encourage taxpayers who planned to make contributions over several years to lump them together in one tax year to qualify for a deduction with the 2 percent floor.

REV-07 LIMIT THE TAX BENEFIT OF ITEMIZED DEDUCTIONS TO 15 PERCENT

	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Revenues	24.0	53.0	55.3	57.6	59.9	62.2	312.0

SOURCE: Joint Committee on Taxation.

Current law allows taxpayers to reduce taxable income by the amount of itemized deductions. Taxpayers who itemize may deduct state and local income and property taxes, home mortgage interest payments, contributions to charity, employee business expenses, moving expenses, casualty and theft losses, and medical and dental expenses. Taxpayers benefit from itemizing if their deductions exceed the standard deduction. Current law limits some itemized deductions to the amount in excess of a percentage of adjusted gross income and reduces all itemized deductions for high-income taxpayers.

The tax benefit of itemized deductions, like all deductions, increases with a taxpayer's marginal tax bracket. For example, $10,000 in itemized deductions would reduce taxes by $1,500 for a taxpayer in the 15 percent tax bracket, $2,800 for a taxpayer in the 28 percent bracket, and $3,960 for a taxpayer in the 39.6 percent bracket. Most taxpayers do not itemize deductions. Among the one in four taxpayers who do itemize, however, about half are in tax brackets above 15 percent. This option would limit the tax benefit of itemized deductions to 15 percent for those higher-bracket taxpayers. The limit would increase revenues by about $312 billion over six years.

Limiting the tax benefit of itemized deductions would make the income tax more progressive by raising average tax rates for most middle- and upper-income taxpayers. The limit might also improve economic efficiency because it would reduce tax subsidies that lower the after-tax prices of selected goods, such as owner-occupied housing.

The itemized deductions for health expenses, casualty losses, and employee business expenses, however, are not subsidies of voluntary activities, but are instead allowances for costs that reduce the ability to pay income tax. Under this option, some taxpayers would pay tax on receipts they use to defray such costs because they would pay tax on their gross income at rates above 15 percent, but could deduct only 15 percent of the cost of earning income. Thus, an individual with unusually high medical bills, for example, would pay more tax than another individual with the same ability to pay but who had low medical bills.

Like other limits on itemized deductions, this option would create incentives for taxpayers to avoid the limit by converting itemized deductions into reductions in income. For example, taxpayers might draw down assets to repay mortgages, reducing both income and mortgage payments, or donate time or services rather than cash to charities. The option would also make calculating taxes more complex for itemizers.

REV-08 PHASE OUT THE DEPENDENT-CARE CREDIT

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Set the Phaseout Starting at:							
$30,000	0.5	1.6	1.6	1.7	1.8	1.8	9.0
$50,000	0.3	1.0	1.0	1.1	1.1	1.2	5.7
$65,000	0.2	0.6	0.7	0.7	0.8	0.8	3.8

SOURCE: Joint Committee on Taxation.

Taxpayers who incur employment-related expenses for the care of children and certain other dependents may claim an income tax credit. The credit per dollar of qualifying expenses declines from 30 percent for taxpayers whose adjusted gross income (AGI) is $10,000 or less to 20 percent for taxpayers whose AGI is above $28,000. Tax law limits creditable expenses to $2,400 for one child and $4,800 for two or more. Creditable expenses cannot exceed the earnings of the taxpayer or, in the case of a couple, the earnings of the spouse with lower earnings. In 1993, taxpayers claimed about $2.6 billion in credits on 6 million tax returns.

Almost half of the credit benefits families with incomes of $50,000 or more. Retaining the credit only for lower-income families would reduce its revenue cost. One way to do that would be to reduce the percentage of credit as income rises. For example, reducing the credit percentage by 1 percentage point for each $1,500 of AGI over $30,000 would raise $9 billion from 1997 through 2002. That option would reduce the credit for about 37 percent of currently eligible families and eliminate it for another 37 percent (families with AGI over $58,500). Alternatively, phasing out the credit between $50,000 and $78,500 would raise about $5.7 billion in the same period. That option would reduce the credit for roughly 30 percent of eligible families and eliminate it for another 20 percent. Finally, phasing out the credit between $65,000 and $93,500 would raise $3.8 billion in the same period, reducing the credit for about 20 percent of eligible families and eliminating it for roughly another 10 percent.

The credit provides a work subsidy for families with children. Phasing out the credit for higher-income families targets that subsidy toward families with greater economic need, but may discourage parents in families with a reduced credit from working outside the home.

If the credit was phased out, higher-income employees could seek other tax benefits for dependent care by asking their employers to provide subsidized day care. Current law allows workers to exclude from taxable income up to $5,000 of annual earnings used to pay for dependent care through employer-based programs. If more employer-subsidized dependent care was provided, budgetary savings would be reduced. To preclude taxpayers from using that alternative, the Congress could limit the use of the fringe benefit.

REV-09 IMPOSE AN EXCISE TAX ON NONRETIREMENT FRINGE BENEFITS

	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Revenues	4.2	6.3	6.8	7.3	7.8	8.3	40.7

SOURCE: Joint Committee on Taxation.

NOTE: Estimates are net of reduced income and payroll tax revenues.

Unlike employee compensation paid in cash, many fringe benefits are exempt from income and payroll taxes. The exemption of employer-paid health and life insurance premiums from tax will cost about $49 billion in income taxes and $39 billion in payroll taxes in 1997. In addition, the law explicitly excludes from gross income employer-paid dependent care and miscellaneous benefits such as employee discounts, parking valued below a specified limit, and athletic facilities. Imposing an excise tax on fringe benefits would diminish the effects of those exclusions.

Excluding fringe benefits from gross income effectively subsidizes their cost, thereby causing people to consume more of such benefits than they would if they had to pay the full price. As a result, resources may be allocated inefficiently. For example, excluding employer-provided parking facilities from taxation has encouraged people to drive to work rather than commute by other means and encouraged employers to build parking facilities on land that might have more productive uses. (The parking subsidy has been partly offset in recent years by another fringe benefit: the exclusion for car pool subsidies and transit passes.) Similarly, excluding employer-provided health insurance has contributed to the large and growing demand for health care services. (See REV-10.)

Such exclusions are inequitable because individuals who earn compensation in cash pay more tax than others with the same total income, part of which is paid in the form of fringe benefits. That inequity is exacerbated to the extent that the higher demand for the fringe benefit by employees drives up the price for people who have to purchase it with after-tax dollars. Moreover, because the tax exclusion is worth more to taxpayers in higher tax brackets and because higher-income taxpayers also receive more fringe benefits than lower-income people, the tax savings from the exclusion are unevenly distributed among income groups.

Making all fringe benefits taxable, however, would present problems in valuing benefits and in assigning their value to individual employees. Appraisal is simpler when employers purchase goods or services and provide them to employees, but it is more difficult to determine the value of a facility, such as a gym, that employers provide. Further difficulties arise if employers must allocate to individual employees the total value of the fringe benefits they provide. For example, in cases in which an employer provides a service, such as employee discounts, it might be unfair to assign the same taxable value to all employees regardless of their level of use. Conversely, it would be administratively complex to assign values that depended on each worker's use. Further, the costs of collecting taxes on small fringe benefits (such as employee discounts) might exceed the revenue collected.

An alternative to including employer-provided benefits in income to recipients would be to impose on employers an excise tax on the value of the benefits that they provide. Those benefits would include the employer's share of health insurance (see REV-10); premiums to fund the first $50,000 of life insurance, the part that is excluded from income (see REV-11); dependent care; athletic facilities; employee discounts; and parking with a value up to the

amount above which it is currently taxed. (Under current law, employees must include in taxable income in 1996 the market value in excess of $165 per month of any parking provided free of charge by an employer. The amount is indexed for inflation each year.) A 3 percent excise tax, for example, would raise about $41 billion from 1997 through 2002. About 90 percent of those revenues would come from taxing employer-paid health insurance.

Under this option, employers would need to know only their total fringe benefit costs; they would not have to place a value on the benefits paid to each employee. Because the 3 percent excise tax rate would be much lower than the tax rate on wages, this option would maintain most of the incentive for employers to provide fringe benefits instead of taxable wages.

A flat-rate excise tax on employers would be relatively more favorable to employees in higher-wage firms than including fringe benefits in employees' taxable income. Under an excise tax, the rate would not rise with the income of employees, as it would if the benefits were subject to the income tax. Within a firm, however, an excise tax can be more or less progressive depending on how the employer allocates the tax among workers.

REV-10 TAX EMPLOYER-PAID HEALTH INSURANCE

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Tax Some Employer-Paid Health Insurance							
Income Tax	6.2	10.2	12.2	14.4	16.9	19.4	79.3
Payroll Tax	4.6	7.6	9.0	10.6	12.3	14.1	58.2
Total	10.8	17.8	21.2	25.0	29.2	33.5	137.5
Tax All Employer-Paid Health Insurance, but Allow Individuals a Credit for Premiums That They or Their Employers Pay up to a Limit							
Income Tax	24.1	-5.4	-3.3	-1.1	1.7	4.4	20.4
Payroll Tax	27.1	40.9	43.9	47.1	50.4	53.9	263.3
Total	51.2	35.5	40.6	46.0	52.1	58.3	283.7

SOURCE: Joint Committee on Taxation.

Employees do not pay taxes on income they receive in the form of employer-paid health insurance. In addition, health insurance premiums and health care costs paid through cafeteria plans are generally excludable from income and payroll taxes. Those exclusions will reduce income tax revenues and payroll tax revenues by a total of about $85 billion in 1997.

Tax Some Employer-Paid Health Insurance. One way to limit the exclusion would be to treat as taxable income for employees any employer contributions for health insurance plus health care costs paid through cafeteria plans that exceed $415 a month for family coverage and $200 a month for individual coverage. Those amounts are estimated average contributions for 1997 and would be indexed to reflect future increases in the general level of prices. The option would increase income tax revenues by about $79 billion and payroll tax revenues by about $58 billion over the 1997-2002 period. Including employer-paid health care coverage in the Social Security wage base, however, would lead to increased outlays on Social Security benefits in the future that could offset most of the added payroll tax revenues from this option over the long run.

This approach would eliminate the tax incentive to purchase additional coverage beyond the ceiling. Employees would have stronger incentives to economize in the medical marketplace, which could reduce both upward pressure on medical care prices and the provision of unnecessary or marginal services. Because the option indexes the ceiling amounts to the overall inflation rate, whereas health care costs have been rising faster than inflation, it could constrain health care costs even more over time. The Congress has already limited the exclusion for employer-paid group term life insurance in a similar way.

One disadvantage of limiting the tax exemption of employer-paid medical insurance premiums is the difficulty of determining when extensive coverage becomes excessive. Also, the level of coverage purchased by a given premium depends on such factors as geographic location and the characteristics of a firm's workforce. As a result, a uniform ceiling would have uneven effects. Finally, if health insurance costs continued to rise faster than the general level of prices, indexing to reflect the general level of prices would gradually reduce subsidies for employer-paid health insurance. Taken together, those

factors could increase the number of workers without health insurance.

Tax All Employer-Paid Health Insurance, but Allow Individuals a Credit for Premiums That They or Their Employers Pay up to a Limit. Another option would treat all employer-paid health insurance premiums as taxable income and disallow payments for health care costs through cafeteria plans, but offer a refundable individual income tax credit of 20 percent for health insurance premiums up to the amounts described above for family and individual coverage. The credits would be available to taxpayers whether or not their employers paid for or sponsored the coverage. The option would increase income tax revenues by about $20 billion over the 1997-2002 period. That amount would be the net result of about $307 billion in revenues if there was no credit, less about $287 billion in new income tax credits. The income tax gain occurs primarily in the first year because many taxpayers would not adjust their withholding to take account of the credit. Payroll tax revenues would rise substantially, however--by about $263 billion over the same period. But as under the first option, increases in Social Security outlays could offset most of the added payroll tax revenues in the long run.

In addition to eliminating the tax incentive for excessive health insurance, as under the first option, this option would offer the subsidy to all taxpayers who purchased health insurance, regardless of their employment status. Moreover, the subsidy per dollar of eligible health insurance premiums would no longer be relatively higher for taxpayers with higher marginal tax rates (and higher incomes). Limiting the amount of insurance eligible for credits to a fixed level, however, creates all of the same problems as in the first option. Moreover, by extending the subsidy to individual purchases of insurance, the option might induce relatively healthy employees to buy insurance outside the work place. Consequently, insurance would become more expensive for the remaining employees, especially at small firms, and that rise in cost could cause more firms to terminate coverage.

REV-11 TAX EMPLOYER-PAID LIFE INSURANCE

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Income Tax	1.2	1.7	1.8	1.9	1.9	2.0	10.5
Payroll Tax	0.9	1.3	1.3	1.3	1.4	1.4	7.6
Total	2.1	3.0	3.1	3.2	3.3	3.4	18.1

SOURCE: Joint Committee on Taxation.

Tax law excludes from taxable income the premiums that employers pay for group term life insurance but limits the exclusion to the cost of the first $50,000 of insurance. The exclusion is not available to the self-employed. Employer-paid life insurance is the third most expensive tax-advantaged fringe benefit (after health insurance, discussed in REV-10, and pensions, discussed in REV-12 and REV-13). Including employer-paid premiums in taxable income would add $10.5 billion to income tax revenues and $7.6 billion to payroll tax revenues from 1997 through 2002.

Like the tax exclusion for other employment-based fringe benefits, the tax exclusion for life insurance creates a subsidy for the fringe benefit, which causes people to purchase more life insurance than they would if they had to pay the full cost for insurance. Furthermore, the tax exclusion allows workers whose employers purchase life insurance for them to pay less tax than workers who have the same total compensation but must purchase insurance on their own (see REV-09). In addition, the value of employer-paid life insurance, unlike some other fringe benefits, could be accurately measured and allocated. Employers could report the premiums they pay for each employee on the employee's W-2 form and compute withholding in the same way as for wages. Employers already withhold taxes on life insurance premiums that fund death benefits above the $50,000 limit.

If the Congress enacts this option, some employers might offer less insurance and substitute larger death benefits under pension plans because pension plans currently have a tax preference. Employees defer income tax and pay no payroll tax on contributions by employers to pension plans. Also, the first $5,000 of employee death benefits are tax-exempt. (The vetoed Balanced Budget Act of 1995 would have repealed that exemption.) However, the tax preference for pension plans is not as generous as that for life insurance under current law, so any substitution of pension plan benefits for life insurance benefits would be limited. Also, employers without pension plans would obviously not be able to substitute those two types of benefits. Any substitution, however, would reduce the revenue estimate below that shown.

REV-12 DECREASE LIMITS ON CONTRIBUTIONS TO QUALIFIED PENSION AND PROFIT-SHARING PLANS

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Decrease Limits for Defined Benefit Plans to the Social Security Wage Base (With equivalent reductions for defined contribution plans)	0.5	1.5	1.4	1.4	1.4	1.5	7.7
Decrease the Limit for Deferrals in Salary Reduction Plans to $4,000	0.4	0.5	0.7	0.7	0.8	0.9	4.0

SOURCE: Joint Committee on Taxation.

Saving for retirement through employer-provided qualified pension and profit-sharing plans provides two tax advantages: it exempts from taxes the investment income earned by the assets in qualified plans, and it defers tax on employer contributions to qualified plans until retirement, when an employee's marginal tax rate is often lower.

Decrease Limits on Employer Contributions. Section 415 of the tax code establishes limits on the benefits that an employer can fund in qualified plans for any employee. The limits depend on the type of plan the employer offers.

Defined contribution plans specify how much the employer will contribute for each employee's retirement--for example, 5 percent of pay. The employee's pension depends on how much the employee's retirement fund accumulates by the time he or she retires. Current law limits annual contributions to such plans to 25 percent of compensation or $30,000, whichever is less.

Defined benefit plans specify the pension amount employees will receive in retirement, which is usually a percentage of preretirement earnings. Employers adjust their annual contributions so that enough will accumulate by the time the employee retires to pay the promised pension. Current law limits contributions to defined benefit plans so that annual benefits for pensions that begin at age 65 are no more than 100 percent of preretirement wages or a fixed amount ($120,000 in 1996), whichever is less. The tax law reduces that limit on an actuarial basis for pensions that begin at an earlier age. When an employer sponsors both types of plans, a higher limit applies--the lesser of 140 percent of wages or $155,000 for 1996.

The limits on employer contributions are intended to limit the size of the tax benefits received by highly paid people. Those people are better able to provide adequately for retirement without the full tax benefits and may use pensions to shelter nonretirement savings from taxation. Furthermore, providing full tax benefits for those people would reduce the progressivity of the tax code.

The main argument for lowering the current limits on contributions is that they allow the funding of pensions far higher than the preretirement earnings of most workers. Three percent of people who worked full time throughout 1994 earned as much as $100,000. Yet current limits allow the funding of pensions up to $120,000. Workers who accrue pensions that large are unlikely to need the full tax advantage to provide adequately for their retirement.

Limiting funding for defined benefit plans to amounts necessary to pay benefits equal to the Social Security wage base ($62,700 in 1996), and making proportionate reductions in limits for defined contribution plans, would raise about $8 billion from 1997 through 2002. The reason is that more employment income would be subject to taxes. Those limits would still be higher than the earnings of all but about 10 percent of full-time, year-round workers.

One argument against reducing the limits is that it would make participation less attractive to high-income business owners and top managers and thus might discourage them from sponsoring such plans for both themselves and their employees. Although the higher-paid managers and owners might not need tax-advantaged pension plans to save adequately for retirement, their employees might. A further argument against reducing the limits is a concern that national saving is too low. Limiting incentives for pension saving could reduce total saving.

Limit 401(k) Deferrals to $4,000. Section 401(k) of the tax code allows employees to choose to receive lower current (taxable) compensation and defer the remainder of compensation as a contribution to an employer retirement plan. Similar arrangements are possible for some workers in the nonprofit sector (403(b) tax-sheltered annuities), federal workers, and workers enrolled in some simplified employer plans (SEPs).

Section 402(g) specifies indexed limits for employee deferrals. In 1996, the limit for deferrals to 401(k) plans, 403(b) annuities, SEPs, and the federal plan is $9,500. Limiting deferrals in all plans with cash or deferred arrangements to $4,000 in 1997, and indexing that limit thereafter, would raise $4 billion in 1997 through 2002.

Lowering the limit would affect higher-income workers who are likely to provide adequately for their own retirement without the tax incentive. In addition, many employers have added 401(k) plans on top of other pension plans that, coupled with Social Security, already meet the basic retirement needs of employees. Those 401(k) plans provide supplementary saving for employees who prefer higher retirement income. Thus, limiting contributions to 401(k) plans would not threaten the basic retirement security of those workers.

Alternatively, higher limits provide a greater incentive for employers to initiate the plans, which benefit employees at all income levels. In particular, 401(k) plans appeal to small employers who have traditionally not established pension plans. Lower limits may discourage small employers from offering what could be the only retirement benefit available to their employees. Lowering limits on those plans and not on other plans encourages traditional pensions, which are primarily defined benefit plans. Unlike defined benefit plans, 401(k) plans and other defined contribution plans do not discriminate against workers who change employers or drop out of the workforce temporarily. In addition, the voluntary nature of plans with cash or deferred arrangements allows workers who have spouses without coverage to save more for retirement than other workers.

Other Funding Limit. In addition to the section 415 and section 402(g) limits described above, section 401(a)(17) limits the amount of compensation that can be considered in calculating an employee's pension benefits. The Omnibus Budget Reconciliation Act of 1993 reduced that compensation limit from $235,840 in 1993 to $150,000 in 1994 and provided for indexing the limit in subsequent years. The limits in section 415 and section 402(g) primarily restrict pension benefits for high-income employees with generous pension plans. The compensation limit primarily restricts pension benefits for all high-income employees.

REV-13 IMPOSE A 5 PERCENT TAX ON INVESTMENT INCOME OF PENSION PLANS AND INDIVIDUAL RETIREMENT ACCOUNTS

	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Revenues	7.3	12.1	12.9	13.6	14.3	14.7	74.9

SOURCE: Joint Committee on Taxation.

Under normal income tax rules, the interest earnings of savings accounts are fully taxable each year. The absence of that annual tax is one of the tax advantages for employer pensions and individual retirement accounts (IRAs). Instituting a tax at a low rate on the earnings of pension funds and IRAs would reduce the size of that advantage. A 5 percent tax rate would raise about $75 billion between 1997 and 2002. (The other tax advantage of pensions and IRAs is the deferral of tax on contributions until retirement, when an employee's marginal tax rate is often lower.)

The tax advantages for pensions and IRAs encourage firms and workers to provide for retirement. Most studies of pensions find that they increase saving; the studies of IRAs are less conclusive. Although the tax advantages promote a public objective, many people receive little or no benefit from them. In 1993, for example, 47 percent of workers neither participated in a pension plan nor contributed to an IRA. The largest pension benefits go to higher-paid workers or to workers with long-term employment at large firms.

Imposing a tax at a low rate on pension and IRA earnings would reduce the tax advantage of saving for retirement through those vehicles. Such a tax would reduce the use of pensions and IRAs and probably result in less retirement saving. The smaller tax advantage for pensions and IRAs would, however, make the tax burden of employees with pensions and IRAs and those without them slightly more equal. It would also increase taxes relatively more for higher-paid workers.

Taxing pension and IRA earnings would affect more taxpayers than would setting lower limits on employer contributions to pension plans (see REV-12). Lowering the contribution limits would increase taxes on a small number of the highest-paid workers and raise taxes substantially for some of them. Taxing pension and IRA earnings would affect workers throughout the income distribution. Moreover, because it would affect so many more workers, it could raise more revenue with a smaller impact for each employee who pays more tax.

Taxing the annual earnings of pension funds and IRAs would encourage fund managers to shift their investments from assets that yield income toward assets that appreciate in value, such as growth stocks and real estate, because they can defer tax on capital gains until realization (see REV-24). To obtain that tax deferral, however, pension funds would have to invest in riskier assets. Although that portfolio shift would reduce the security of workers' retirement funds, it would make it easier for risky enterprises to obtain funding.

In the vetoed Balanced Budget Act of 1995, the Congress proposed to expand access to IRAs and broaden their use beyond retirement saving. Taxing the investment income of IRAs runs counter to the objective of expanding IRA use, but it would also mitigate the revenue loss from such an expansion.

REV-14 TAX THE INCOME-REPLACEMENT PORTION OF WORKERS' COMPENSATION AND BLACK LUNG BENEFITS

	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Revenues	1.3	3.7	3.8	3.9	4.1	4.2	21.0

SOURCE: Joint Committee on Taxation.

Current law exempts workers' compensation and Black Lung benefits from income taxation. Taxing the portion of those benefits that replaces the income employees lose from work-related injuries or black lung disease would increase revenues by $21 billion from 1997 through 2002. The remaining portion of benefits, which reimburses employees for medical costs (about 40 percent), would continue to be exempt from taxation.

Taxing the income-replacement portion of workers' compensation and Black Lung benefits would make the tax treatment of those entitlement benefits comparable to the treatment of unemployment benefits and the wage-replacement benefits that employers provide through sick pay and disability pensions. It would also improve work incentives for disabled workers who are able to return to work. (Under current law, the after-tax value of the wages they are able to earn may be less than the tax-free benefits they receive while disabled.)

An argument against taxing such benefits is that legal or insurance settlements for non-work-related injuries are not taxable, even if a portion of them reimburses lost income. Hence, taxing workers' compensation benefits would treat those two types of compensation inconsistently.

Furthermore, if the current levels of wage-replacement benefits were established under the assumption that they would be untaxed, this option would reduce benefits below desired levels. Enacting the option, therefore, might lead to efforts to increase benefits, thereby reducing the intended deficit reduction.

REV-15 INCREASE TAXATION OF SOCIAL SECURITY AND RAILROAD RETIREMENT BENEFITS

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Tax 85 Percent of Benefits for All Recipients	9.2	23.4	24.5	25.6	26.7	27.9	137.3
Tax 85 Percent of Benefits for Recipients with Income Above $44,000 (Couples) and $34,000 (Individuals), and Tax 50 Percent of Benefits for All Other Recipients	4.5	11.6	12.1	12.7	13.2	13.8	67.9
Tax 85 Percent of Benefits for Recipients with Income Above $32,000 (Couples) and $25,000 (Individuals)	0.4	0.9	1.0	1.0	1.1	1.1	5.5

SOURCE: Joint Committee on Taxation.

Social Security and Railroad Retirement (Tier I) together constitute the federal government's largest entitlement program. Most benefits are not subject to tax. Under current law, a taxpayer first calculates his or her combined income, which is the sum of adjusted gross income (AGI), nontaxable interest income, and one-half of Social Security and Tier I benefits. If a taxpayer's combined income exceeds a fixed threshold, he or she includes a fraction of benefits in AGI. The thresholds at which up to 50 percent of benefits are subject to tax are $25,000 for single returns and $32,000 for joint returns. The Omnibus Budget Reconciliation Act of 1993 (OBRA-93) imposed a second set of thresholds, $34,000 (single) and $44,000 (joint), above which up to 85 percent of benefits become subject to tax. The additional revenues from the higher thresholds go to the Medicare trust fund, whereas all other revenues from taxing Social Security benefits go to the Social Security retirement and disability trust funds.

About 23 percent of households receiving Social Security pay income tax on some portion of their benefits, and about one-third of those households pay tax on 85 percent of their benefits. Because the thresholds remain fixed over time, as nominal incomes increase, the percentage of households that pay tax on benefits will grow to 31 percent in 2002. Bills to remove the 85 percent rate were proposed in 1995 but not enacted.

The first option would eliminate the income thresholds entirely and would require all beneficiaries to include 85 percent of their benefits in their adjusted gross income. It would raise $137 billion from 1997 through 2002. Eliminating the income thresholds would cause many more, but not all, Social Security recipients to pay income tax on their benefits. In addition to the thresholds, the tax code through personal exemptions, the regular standard deduction, and an additional standard deduction for the elderly protects the income of lower-income elderly households from being taxed. Eliminating the thresholds on taxing benefits would triple the share of couples and individuals paying tax on their benefits from the current 23 percent to 69 percent.

Eliminating the thresholds would reduce tax disparities among middle-income households. Social Security beneficiaries receive a tax preference not available to other taxpayers because they can exclude a portion of their income--Social Security benefits below the thresholds--from AGI. As a result, the average income tax rate that middle-income elderly

families pay is less than the tax rate that nonelderly families with comparable income pay under current law.

The second option would not change the treatment of couples with combined income above \$44,000 and individuals with combined income above \$34,000--they would still be taxed on up to 85 percent of their benefits--but it would require all other recipients to include 50 percent of benefits in their adjusted gross income. That option would raise \$68 billion from 1997 through 2002. Couples with combined income below \$32,000 and individuals with combined income below \$25,000 would be added to the beneficiaries whose benefits are subject to tax. Almost all beneficiaries currently taxed on up to 50 percent of their benefits--couples with combined income between \$32,000 and \$44,000 and individuals with combined income between \$25,000 and \$34,000--would be unaffected. (Because the taxation of benefits is phased in under current law, some couples with combined income just above \$32,000 and singles with income just above \$25,000 are now taxed on less than a full 50 percent of their benefits.)

The final option would keep the current-law income threshold of \$32,000 for couples and \$25,000 for individuals, while including up to 85 percent of benefits for all taxpayers above that threshold. The option would raise \$5.5 billion from 1997 through 2002. It would, moreover, almost exclusively affect couples with modified income between \$32,000 and \$44,000, and individuals with income between \$25,000 and \$34,000.

Increasing the percentage of benefits that are taxable from 50 percent to 85 percent would make the treatment of Social Security roughly similar to that of contributory pension plans. Workers receiving benefits from contributory plans pay income tax on the excess of benefits over their own contributions. Social Security actuaries estimate that among workers now entering the labor force, employee-paid payroll taxes will represent 15 percent of expected benefits for high-earning, unmarried workers and a lower percentage for all other workers. Thus, 85 percent is the minimum fraction of benefits in excess of past contributions. However, a lower rate might be appropriate for two reasons. First, benefits will have to be cut or taxes raised at some point in the future to restore the long-run balance of Social Security. Either change would raise taxes as a share of benefits above 15 percent for some workers. Second, keeping the inclusion rate at 50 percent would make the treatment of Social Security equivalent in terms of present value to that of noncontributory pensions, the more common form of pension.

Increasing the tax on benefits would reduce the net benefits of retirees compared with what some people consider to be the implicit promises of the Social Security and Railroad Retirement programs at the time recipients were working. The government has, however, made numerous changes in the Social Security and Railroad Retirement programs over time, including changing the benefit formula, introducing partial taxation of benefits, and raising payroll tax rates to finance the programs.

Increased taxation of Social Security benefits is one way to apply a means test to those benefits. As an alternative to expanding taxation, the government can reduce benefits from those programs by changing the benefit formula (see ENT-39 through ENT-42), reducing cost-of-living adjustments (see ENT-48), or including benefits in a broadly based means test of multiple entitlement programs (see ENT-49).

REV-16 TAX INVESTMENT INCOME FROM LIFE INSURANCE AND ALL ANNUITIES

	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Revenues	5.1	13.3	16.3	18.4	20.3	22.1	95.5

SOURCE: Joint Committee on Taxation.

Life insurance policies often combine features of both insurance and tax-favored savings accounts. In the early years of whole life insurance and similar policies, annual premiums exceed the annual cost of insurance. As the excess premiums accumulate, they earn investment income, which is then available to pay the cost of future insurance, provide part of a death benefit, or provide a disbursement to the policyholder if the policy is voluntarily canceled.

The investment income, sometimes called "inside buildup," receives special tax treatment under current law compared with the interest income from other investments. It is exempt from taxation when used to pay the cost of future life insurance. It is also tax-exempt to the beneficiary or, with some tax planning, to the estate of the insured person when it is paid as part of a death benefit. The accumulated investment income is taxable to the policyholder when he or she voluntarily cancels a policy and receives a disbursement. Even when the investment income is ultimately taxable, however, the tax deferral can be favorable to the policyholder. The interest income from other investments, such as taxable bonds, is subject to tax as it accrues, even when interest is not paid to the investor until the bond matures.

Life insurance companies also sell annuities, which likewise have features of both insurance and tax-favored savings accounts. Life annuities promise periodic payments to the annuitant as long as he or she lives. Those payments provide insurance against the possibility that the annuitant will outlive his or her assets. By nature, however, annuities are also saving vehicles because annuity premiums are paid in return for annuity benefits received at a later date. Because premiums are often paid long before benefits are received, the benefits must include a return on investment in order for an annuity to be financially attractive.

For tax purposes, annuity benefits are divided into two parts--a return of principal and investment income. Only the investment income is subject to tax. Although investment income accrues over the life of a contract, it is not included in taxable income until benefits are paid. As with whole life insurance and other similar policies, such tax deferral can increase the after-tax return to the investor significantly compared with alternative investments such as taxable bonds and certificates of deposit from which interest income is taxable as it accrues.

Tax Investment Income Annually. Under this option, policyholders would include the investment income from life insurance policies and annuities in taxable income as it accrued. Insurance companies would report the accrued investment income to a policyholder or annuitant annually. Life insurance disbursements and annuity benefits would no longer be taxable as they were paid. Making the investment income taxable in that way would raise about $95 billion in 1997 through 2002. Investment income from annuities purchased as part of a qualified pension plan or qualified individual retirement account would still be tax-deferred until benefits were paid.

Taxing the investment income from life insurance and annuities would equalize their tax treatment with the tax treatment of similar investments. The investment income from life insurance and annuities is tax-deferred, but the income from an ordinary savings account or taxable bond is taxed as it accrues. Alternatively, the tax deferral for life insurance and annuities is consistent with the tax deferral currently allowed for capital gains income.

A tax incentive to purchase life insurance is desirable if people systematically underestimate the financial hardship on spouses and families caused by their own death. Such shortsightedness could cause them to buy too little life insurance. Similarly, it might cause people to buy too little annuity insurance to protect them against outliving their assets. But it is not currently known whether people would buy too little insurance without the tax incentive, or the extent to which the tax incentive increases the amount of life insurance or annuity coverage. If the incentive is justified to correct for people's shortsightedness rather than subsidize the inside buildup, a better policy might be to subsidize life insurance directly by allowing a tax credit or partial deduction for insurance premiums. Annuities receive other tax incentives through the special tax treatment of pensions and retirement savings.

A tax preference for inside buildup in life insurance policies and annuities may encourage saving because it increases people's income when they are older for each dollar they save when they are younger. The tax preference might, however, reduce saving because it also enables people to save less when they are younger without reducing their expected income when they are older. The net effect on saving is uncertain.

A More Limited Option. Some annuity contracts sold by life insurers provide little or no insurance against outliving assets. For example, a contract may guarantee to pay a minimum total benefit regardless of how long the annuitant lives. Other annuities simply make predetermined benefit payments over a fixed term. Such "term-certain" annuities are simply investments and are essentially identical to bonds, bank certificates of deposit, or money market mutual funds.

Under a more limited option, an individual's taxable income would include the annual accrual of investment income only from annuity benefits that are guaranteed to exceed a certain amount or to be paid over a fixed period, regardless of how long the annuitant lives. The insurance companies would annually report to individuals the amounts to be included as taxable income. To lessen the burden of compliance, however, no reporting or accrual taxation would be required when the term-certain portion of the value of an annuity accounted for less than one-third of its value. Annuities purchased as part of a qualified pension plan or qualified individual retirement account would also be exempted. This option is similar to a proposal made by the Bush Administration in its 1993 budget. An estimate of the option's budgetary effect is not available.

REV-17 TAX A PORTION OF THE INSURANCE VALUE OF MEDICARE BENEFITS

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
With Income Thresholds							
Tax Hospital Insurance Only	2.4	6.5	7.5	8.7	10.0	11.4	46.5
Tax Supplementary Medical Insurance Only	1.2	3.3	3.9	4.6	5.3	6.2	24.5
Tax Both	3.8	10.1	11.8	13.7	15.6	17.8	72.8
Without Income Thresholds							
Tax Hospital Insurance Only	3.6	12.3	13.8	15.4	16.9	18.5	80.5
Tax Supplementary Medical Insurance Only	1.7	6.0	7.0	8.0	9.1	10.4	42.2
Tax Both	5.7	19.7	22.3	25.1	28.1	31.4	132.3

SOURCE: Joint Committee on Taxation.

Like Social Security, Hospital Insurance (HI) benefits under Medicare are financed by payroll taxes that are earmarked for a trust fund. Social Security benefits, however, are partially taxable for higher-income people, whereas the value of HI benefits is not subject to tax. In addition, the Supplementary Medical Insurance (SMI) component of Medicare is heavily subsidized; premiums cover only about one-fourth of the benefits paid, and that share is projected to decline to less than one-sixth over the next decade. This option would tax HI the same way Social Security is taxed under current law or under the tax option in REV-15 and would partially tax SMI.

The first option would treat the insurance value of Medicare much like Social Security benefits, although the tax would be imposed on the average insurance value of in-kind Medicare benefits, not on the dollar value of benefits actually received. In this option, 85 percent of the value of HI and 75 percent of the value of SMI would be included in adjusted gross income (AGI) for taxpayers with combined income (AGI plus nontaxable interest income plus one-half of Social Security, Railroad Retirement, and Medicare benefits) of more than $34,000 for single returns and $44,000 for joint returns. For taxpayers with combined income below those thresholds but above $25,000 (single) and $32,000 (joint), 50 percent of the insurance value of both HI and SMI would be included in AGI. Taxpayers with lower income would have no additional tax liability. Because the thresholds are fixed, inflation would cause a larger fraction of Medicare insurance benefits to become taxable over time.

With those income thresholds, the HI tax alone would increase federal revenues by $46.5 billion from 1997 through 2002. The SMI tax alone would yield $24.5 billion over the six-year period. If both taxes were imposed simultaneously, revenues would be about $73 billion higher over six years. The combined tax would generate more revenues than the sum of the HI and SMI taxes because some taxpayers would be subject to higher tax rates as a result of the increase in AGI. In addition, more enrollees would have income above the threshold when both components are included.

The second option would include 85 percent of the insurance value of HI benefits and the subsidy component of SMI (about 75 percent) in AGI for all taxpayers. Without an income threshold, the HI tax alone would increase federal revenues by $80.5 billion over the 1997-2002 period. Revenues from the SMI tax alone would be $42.2 billion over the six-year period. If both taxes were imposed simulta-

neously, revenues would be $132 billion higher over the six-year period.

Earmarking revenues from taxing HI benefits for the HI trust fund would delay the projected deficit of the trust fund in 2001. A tax on SMI benefits would shift some SMI costs from taxpayers to enrollees. Using income thresholds would leave lower-income enrollees unaffected. In fact, because many beneficiaries do not have to pay income taxes, this proposal would affect only about 47 percent of enrollees in 1997 even if no income thresholds were used. Furthermore, since this option would use the mechanism already in place for taxing Social Security benefits, it would be straightforward to administer.

Unlike the tax on Social Security benefits, this tax would be imposed on the insurance value of in-kind benefits rather than on the dollar benefits actually received. Some people might object that the additional income does not generate cash with which to pay the tax liability. (Basing the tax on actual benefits received, however, has little to recommend it because the tax would then be directly related to the health care costs of enrollees. Such a tax would reduce the insurance protection Medicare is intended to provide.) In addition, the actual value of insurance provided under Medicare varies among households based on age, health status, and whether they have other health insurance.

Thus, including a fixed imputed premium in income might be viewed as unfair. The approximately 14 percent of enrollees in or above the 28 percent tax bracket would face a tax increase averaging about $1,330 in 1997 for individuals and about $2,670 for couples with two enrollees, assuming the combined tax was imposed with no income thresholds. In addition, more households would have to pay tax on Social Security benefits if the definition of combined income was expanded to include Medicare benefits.

REV-18 EXPAND MEDICARE AND SOCIAL SECURITY COVERAGE

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Expand Medicare Coverage to Include State and Local Government Employees Not Now Covered	1.1	1.5	1.4	1.4	1.3	1.3	8.0
Expand Social Security Coverage to Include All New State and Local Government Employees	0.3	1.3	2.3	3.3	4.2	5.2	16.6

SOURCE: Congressional Budget Office.

NOTE: Estimates do not include the effect of any increases in benefit payments that would result from the option. They would be small over this six-year period. Estimates are net of reduced income tax revenues.

Certain groups of federal, state, and local government employees are not covered under the Medicare and Social Security programs, despite recently expanded coverage. The Tax Equity and Fiscal Responsibility Act of 1982 required all federal employees to pay Medicare payroll taxes beginning in 1983, and the Social Security Amendments of 1983 required federal employees who began work after December 31, 1983, to pay Social Security payroll taxes. The Consolidated Omnibus Budget Reconciliation Act of 1985 mandated that state and local employees who began work after March 31, 1986, pay Medicare payroll taxes. The Omnibus Budget Reconciliation Act of 1990 expanded Social Security and Medicare coverage to include state and local government employees not covered by any retirement plan.

Under current law, many state and local employees will qualify for Social Security and Medicare benefits based on other employment in covered jobs or their spouse's employment. Those employees will thus receive benefits in return for a smaller amount of lifetime payroll taxes than are paid by people who work continuously in covered employment. That inequity is especially apparent for Medicare benefits: one out of six state and local employees is not covered through his or her employment, but 85 percent receive full Medicare benefits through their spouse or because of prior work in covered employment. Inequitable treatment is less of a problem in the case of Social Security benefits because the benefit formula is adjusted for retired government employees who have worked a substantial portion of their career in employment not covered by Social Security.

Requiring all state and local employees to pay Medicare payroll taxes, and all new state and local employees to pay Social Security payroll taxes, would make coverage of state and local employees resemble that of federal employees. That broader coverage would reduce the inequity from the high benefits those employees receive in relation to payroll taxes paid. Expanding Medicare and Social Security payroll taxes to include more state and local employees would increase the government's liability for future program benefits. The additional revenues, however, would most likely more than offset increased benefits permanently.

Expand Medicare Coverage to Include State and Local Government Workers Not Now Covered. Expanding Medicare coverage to include state and local government employees who began work before April 1, 1986, would raise $8 billion from 1997 through 2002. The annual revenue gain would decline gradually over time because the number of employees who were hired before April 1986 and remain on the payrolls of state and local governments

declines over time. The provision was included in title VII of the 1995 Senate reconciliation bill, but was later dropped in conference.

Expand Social Security Coverage to Include All New State and Local Government Workers. Retirement coverage for state and local government employees may be provided by a public-employee program, the Social Security program, or a plan that integrates both programs. Expanding Social Security coverage to include all new state and local government employees would raise about $17 billion from 1997 through 2002, although in the long run higher Social Security benefit payments would offset a portion of the extra revenue. The annual revenue gain would grow rapidly--to $5.2 billion by 2002--because the pool of new employees would grow rapidly.

How states and localities revised their pension plans in response to mandatory coverage would determine which employees gained and lost from that change, but requiring coverage of new state and local government employees would probably benefit many employees who spent only part of their career in the government sector. First, because of the portability of coverage, newly hired employees might find it easier to qualify for disability and survivors' benefits under Social Security than under many public-employee benefit programs. Second, unlike many public-employee plans, state and local employees would not lose Social Security eligibility if they change jobs before they are vested. Third, because Social Security benefits are calculated on the basis of inflation-adjusted wages, many employees who worked only when they were young might receive more generous retirement benefits from Social Security than from public pension plans.

State and local governments would have to pay the employer's share of Social Security taxes on new employees if coverage was made mandatory. Because state and local government participation in Social Security is now voluntary, those states with a low percentage of covered employees would bear more of the cost of expanded mandatory coverage, including the cost of setting up the payment system.

REV-19 INCREASE THE PAYROLL TAX RATE FOR MEDICARE HOSPITAL INSURANCE BY ONE PERCENTAGE POINT

	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Revenues	25.1	35.1	36.9	38.8	40.7	42.7	219.3

SOURCE: Congressional Budget Office.

NOTE: Estimates are net of reduced income tax revenues.

Medicare Part A, which is also known as the Hospital Insurance (HI) program, pays for hospital care and related medical expenses for the elderly. The program is financed by a 1.45 percent payroll tax on employees and employers, which results in a combined payroll tax rate of 2.9 percent. Increasing the combined HI tax rate by 1 percentage point to 3.9 percent would generate about $220 billion in revenues from 1997 through 2002.

The Congress has taken a number of steps in recent years to increase revenue to the trust fund. The Omnibus Budget Reconciliation Act of 1990 more than doubled the maximum amount of earnings subject to the HI tax, from $51,300 in 1990 to $125,000 in 1991. The Omnibus Budget Reconciliation Act of 1993 eliminated the taxable maximum earnings starting in 1994 and allocated revenue to the Hospital Insurance Trust Fund resulting from an increase in the tax on Social Security benefits.

However, despite those recent increases in earmarked revenue, the Congressional Budget Office projects that the assets of the Hospital Insurance Trust Fund will be completely depleted during 2001. In its final report issued in 1995, the Bipartisan Commission on Entitlement and Tax Reform discussed a variety of HI payroll tax increases that would improve the trust fund's actuarial balance. Increasing the combined HI tax rate by 1 percentage point to 3.9 percent would lengthen the solvency of the trust fund until beyond 2006.

Increasing the HI tax rate would reduce the returns from working and could create incentives for employees to work less or to take more compensation in the form of nontaxable fringe benefits. But since higher tax rates also reduce total after-tax income, employees might choose to work more in order to maintain the same level of disposable income.

Increasing the HI tax rate would also be relatively more burdensome on low- and middle-income families. HI taxes are the same percentage of wages and salaries for all workers. They are, however, a smaller percentage of family income for high-income families because wages fall as a share of income. Medicare insurance coverage is the same for all eligible beneficiaries and is not related to current income or past payroll tax contributions.

The 104th Congress has considered a variety of options to restructure Medicare and improve its long-term solvency. Increasing the HI tax rate is only one possibility. For a discussion of the types of options available, see Chapters 6 and 7 of this report.

REV-20 INCREASE THE MAXIMUM TAXABLE EARNINGS FOR THE SOCIAL SECURITY PAYROLL TAX

	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Revenues	12.3	18.5	19.4	20.4	21.4	22.5	114.5

SOURCE: Congressional Budget Office.

NOTE: Estimates are net of reduced income tax revenues.

Social Security--composed of the Old-Age, Survivors, and Disability Insurance (OASDI) programs--is financed by a payroll tax on employees, employers, and self-employed individuals on earnings up to a specified maximum. The maximum amount of taxable earnings is increased automatically each year in proportion to the increase in average annual earnings. For 1996, the maximum taxable earnings are $62,700 and are projected to increase to $65,100 in 1997. Approximately 87 percent of earnings in employment covered by the programs fall below the maximum. Increasing the maximum taxable earnings to $95,000 in 1997, and continuing to index them for average growth in earnings thereafter, would place about 90 percent of total covered earnings below the maximum and would generate about $115 billion from 1997 through 2002.

When Social Security began in 1937, about 92 percent of earnings in employment covered by the program were below the maximum. That percentage gradually declined over time as the earnings of workers grew, but the maximum increased only occasionally when the Congress enacted specific increases to it. By 1978, about 84 percent of total covered earnings were below the maximum. In the 1977 Social Security Amendments, the Congress intentionally provided for increases in the earnings base in 1979, 1980, and 1981 to raise the taxable percentage of covered earnings to 90 percent. Since achieving that percentage in 1982, the taxable maximum has automatically increased each year by the increase in average wages.

Despite indexing the maximum amount of taxable earnings, the taxable fraction of covered earnings has slipped below 90 percent over the past decade as a result of faster-than-average growth in the earnings of the highest earners. By 1994, the taxable ratio was about 87 percent. Increasing the maximum taxable earnings could restore the percentage to its 1982 level. In its final report issued in 1995, the Bipartisan Commission on Entitlement and Tax Reform discussed this option as a means of improving the actuarial balance of the OASDI trust funds.

Increasing revenues that are earmarked for Social Security would improve the solvency of the trust funds. Under the intermediate assumptions of the funds' Board of Trustees, total income is expected to exceed expenditures only through 2019, and the combined trust fund will be completely exhausted by about 2030. Increasing the maximum taxable earnings would improve the long-range solvency of the system by pushing back both of those dates, thereby helping the system move closer to actuarial balance. (For long-term considerations of the Social Security program, see Chapter 7 of this report.)

Because individuals with income above the maximum amount of taxable earnings do not pay the tax on all of their earnings, they pay a lower share of their total earnings in payroll taxes than do individuals with total earnings below the maximum. Increasing the maximum taxable earnings would raise payroll taxes for high-income earners and make the pay-

roll tax more progressive. Although that change would also entitle individuals with earnings above the old maximum to higher retirement benefits, those additional benefits would be low relative to the additional taxes they would have to pay.

Increasing the maximum taxable earnings would reduce the additional return from working for individuals whose earnings are above the old maximum but below the new maximum, because those earnings would become subject to the payroll tax. Those workers would have an incentive to work less or to take more compensation in the form of fringe benefits that are not subject to the payroll taxes. Increasing the maximum taxable earnings would not reduce the return from work for employees with earnings in excess of the new maximum. Those employees would not have an incentive to reduce their earnings. Instead, they would have some incentive to work more to maintain the same level of after-tax income.

REV-21 CURTAIL TAX SUBSIDIES FOR EXPORTS

	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Revenues	2.5	4.4	4.8	5.2	5.5	5.8	28.2

SOURCE: Joint Committee on Taxation.

The tax code subsidizes U.S. exports in two important ways. First, the allocation of income between domestic and foreign business activities under the "title passage" rule routinely allows U.S. multinational companies to use excess foreign tax credits to offset about half of the U.S. tax on their export income by characterizing it as foreign-source income. Second, the tax rules for foreign sales corporations (FSCs) offer U.S. companies an opportunity to exempt about 15 percent of their export income from U.S. tax by characterizing it as income of a foreign subsidiary that is not effectively connected with U.S. trade or business.

Sourcing Rules for Sales of Inventory. U.S. companies generally pay U.S. tax on their worldwide income, but they may claim a foreign tax credit. The foreign tax credit reduces the tax that U.S. companies owe on foreign-source income by the amount of income tax they pay abroad. To prevent the foreign tax credit from offsetting domestic-source income, the tax code limits the credit to the amount of tax owed on foreign-source income. When foreign tax payments exceed the U.S. tax on foreign-source income, U.S. companies accrue excess foreign tax credits that they cannot currently use. U.S. companies retain those excess credits to offset taxes owed on future income from foreign sources, but only for five years.

In allocating worldwide income between domestic and foreign sources, sourcing rules determine how fully U.S. companies can use their foreign tax credits to reduce their U.S. tax liability. For example, when a corporation has excess foreign tax credits, treating a dollar of income as foreign-source income instead of domestic-source income allows the corporation to use excess credits that might otherwise expire to reduce the U.S. tax on its worldwide income by about 35 cents.

Sales income is classified for tax purposes as domestic or foreign source according to a complex set of sourcing rules that take account of the residence of the seller, the place of sale, the location of the seller's business activities, and the presence of any foreign tax on the sales income. Under a particular rule known as the "title passage" rule, the income of a U.S. company from the sale of inventory is sourced according to the place of sale. So when inventory is sold abroad, the income from the sale is deemed foreign-source income, regardless of where the inventory was purchased and regardless of whether the income was subject to foreign tax. When a U.S. company produces the inventory in the United States and markets it abroad, half of the income is typically classified as foreign source on the basis of the title passage rule and half is classified based on the location of the production activity. Assuming the company has excess foreign tax credits to offset the tax on its foreign-source income, the 50-50 allocation effectively exempts half of the export income from U.S. tax.

If the title passage rule allows a company with excess foreign tax credits to classify more of its export income as foreign source than it could justify solely on the basis of the location of its business activities, then the company receives an implicit export subsidy.

Foreign Sales Corporations. According to a decision by the governing council of the General Agreement on Tariffs and Trade (GATT), export income can be exempt from U.S. tax only if the economic

activity that produces the income takes place outside the United States. In response to the GATT decision, the tax code was amended by the Congress to allow U.S. companies to charter FSCs in low-tax countries and either supply goods to the FSCs for resale abroad or pay commissions to them on export sales. Although the FSCs are largely paper corporations with very few employees, the Congress believes that they have enough foreign presence and economic substance to meet GATT's requirements to exempt export income.

Under the tax code, when a U.S. company sells exports through an FSC, about 23 percent of the total income from production and marketing is attributed to the FSC and about 65 percent of the FSC's export income is exempt from U.S. tax. The exempt income, which is approximately 15 percent of the income from the sale, remains free from U.S. tax when the U.S. company receives it as a dividend from the FSC.

Economic Effects of Export Subsidies. Export subsidies increase investment and employment in export industries, but do not increase the overall levels of domestic investment and domestic employment. Stimulating exports increases the demand for U.S. dollars by foreigners, which raises the value of the dollar and lowers the cost of imports, causing imports to increase. In the long run, export subsidies increase imports as much as exports. As a result, investment and employment in import-competing industries in the United States would decline about as much as they increased in the export industries.

Export subsidies reduce domestic welfare by distorting the allocation of economic resources at home and abroad. The subsidized production of export goods in the United States partially displaces the more efficient production of those goods abroad. Moreover, the subsidies increase the worldwide supply of goods that the United States exports and decrease the worldwide supply of goods that the United States imports. The shifts in supply lower the world price of U.S. exports and raise the price of U.S. imports. As a result, domestic welfare suffers because the United States receives fewer import goods in exchange for its export goods.

Curtailing the export subsidies provided by the title passage rule and the favorable tax treatment of FSCs would raise about $28 billion from 1997 through 2002. The option would curtail the export subsidy from the title passage rule by eliminating it and treating the income of U.S. companies from the sale of goods abroad as domestic-source income. An exception would be allowed, however, if a U.S. company had a place of business that was located outside the United States and was substantially involved in the export sale. Under the exception, income would be allocated between domestic and foreign sources based on the location of the business activities that produced the income.

The option would curtail the subsidy from FSCs by treating them like other foreign subsidiaries. In general, all of the income repatriated from FSCs would be subject to U.S. tax, but some of it might be foreign-source income under the revised sourcing rule mentioned above. The tax on any income from a FSC that was deemed foreign-source income could be offset by unused foreign tax credits.

REV-22 IMPOSE A MINIMUM TAX ON FOREIGN-OWNED BUSINESSES

	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Revenues	0.2	0.3	0.4	0.5	0.5	0.5	2.4

SOURCE: Joint Committee on Taxation.

Foreign-owned companies must pay tax on the income they earn from business activities within the United States. Treaties with other countries generally stipulate that the United States will not tax the income of foreign-owned businesses more heavily than the income of U.S.-owned businesses.

When foreign multinational corporations operating in the United States import materials and services from affiliated companies abroad, the "transfer price" of imports affects the amount of income that is subject to U.S. tax. (The transfer price is the price charged for goods sold between affiliated companies.) By raising the transfer price of imports, foreign-owned companies can shift income out of the United States to their foreign affiliates and reduce their U.S. tax liability. U.S. tax law requires companies to base the transfer prices of many goods and most services on comparable transactions between unaffiliated companies. But such prices are often difficult for companies to determine and even more difficult for the Internal Revenue Service to enforce, especially when comparable goods and services are not routinely traded between unaffiliated companies.

Foreign-owned multinational corporations may be manipulating transfer prices to shift income overseas and avoid U.S. tax. Circumstantial evidence has indicated that this kind of tax avoidance has occurred. For example, studies have found that the reported profit rates (as a percentage of assets and as a percentage of sales) of foreign-owned multinational corporations operating in the United States are generally lower than the profit rates of U.S.-owned corporations in the same industry.

However, other plausible explanations exist for the low profit rates. For example, foreign-owned companies may have newer plants and equipment than U.S.-owned companies in the same industry. Because accelerated depreciation methods allow companies to claim larger annual deductions on newer equipment than on older equipment, foreign-owned companies would have higher reported depreciation costs and lower reported profit rates as a percentage of sales. Moreover, the lack of an inflation adjustment for the book value of plant and equipment undervalues older assets relative to newer assets. As a result, U.S.-owned companies with older assets would tend to have higher profit rates as a percentage of reported book value than foreign-owned companies with newer assets. When foreign-owned companies are the result of recent acquisitions, they would tend to have lower than average rates of profit. Newly acquired companies tend to have more debt, larger depreciation deductions, and higher book value from assets that are revalued on acquisition.

To discourage foreign companies from manipulating transfer prices to avoid U.S. tax, a minimum tax could be levied on foreign-owned businesses that have a sizable amount of trade with affiliated companies overseas. One legislative provision, introduced in 1992, would have imposed a minimum tax on all companies that are at least 25 percent foreign owned and have transactions with foreign affiliates in excess of either 10 percent of their gross income or $2 million annually. Under the proposal, the foreign-owned company would compute its taxable income under the current income tax rules, but its taxable income would be subject to a floor. The floor would equal

75 percent of its gross business receipts multiplied by the average profit margin on gross receipts for U.S. companies in the same industry. If the foreign-owned company's operations spanned several industries, the floor would be based on the profit margins in each industry weighted by the share of the company's gross receipts in that industry. The Internal Revenue Service could waive the minimum tax after examining a company's method of computing transfer prices and finding it acceptable.

The formula approach under the minimum tax provides a simple way to ensure that foreign-owned companies conducting business in the United States pay an acceptable amount of U.S. tax. The simplicity of the approach may offer some advantage over the cumbersome rules for arm's-length pricing, which are extremely difficult to enforce. The formula approach, however, provides a very crude estimate of taxable profit.

The minimum tax would discriminate against foreign-owned companies, possibly in violation of U.S. treaties, by taxing their income more heavily than the income of their domestic competitors. The minimum tax would be especially onerous on foreign-owned companies starting new businesses in the United States because new businesses are seldom profitable initially. Under the minimum tax, such businesses would still owe a sizable amount of income tax based on their gross receipts.

Other countries would be likely to treat the minimum tax as a protectionist measure and retaliate with similar taxes on U.S.-owned companies conducting business within their borders. If so, the minimum tax would stifle international trade and reduce economic welfare throughout the world. Imposing the minimum tax on foreign-owned companies, which is one of many possible formulary approaches, would raise $2.4 billion from 1997 through 2002.

REV-23 TAX CAPITAL GAINS FROM HOME SALES

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Tax 30 Percent of Gain	1.9	5.4	5.5	5.7	5.9	6.0	30.4
Tax Lifetime Gains in Excess of $125,000	0.2	0.8	0.8	0.9	0.9	0.9	4.5

SOURCE: Joint Committee on Taxation.

When homeowners sell their home, they realize a capital gain or loss equal to the difference between the selling price and their basis. Their basis is the initial cost of the home plus the cost of home improvements.

Although capital gains on most assets are taxable when the assets are sold, capital gains on home sales generally escape taxation. A taxpayer can defer the capital gain from the sale of a principal residence if she or he purchases another home of at least equal value within two years. When a homeowner dies, the accrued gain on the current home plus any gain on previous homes escapes tax permanently. Further, the tax law allows taxpayers age 55 and older to exclude up to $125,000 of gain from one home sale even if they do not purchase another home of equal or greater value within two years. Replacing the above provisions with a rule that includes 30 percent of capital gains from home sales in taxable income would raise $30.4 billion in 1997 through 2002. Alternatively, including all lifetime gains in excess of $125,000 in taxable income when realized would raise $4.5 billion over the same period.

The preferential treatment of capital gains from home sales is only one of the ways in which the tax code strongly favors owner-occupied homes over other investments (for a discussion of other ways, see REV-04). All of those tax preferences divert savings from business investment to housing. One way to make the tax treatment of housing more like that of other assets would be to replace the capital gains deferral and exclusion provisions with a low tax rate on gains from home sales. Including 30 percent of the gain from home sales in taxable income would make the tax rate on such gains range from 4.5 percent for taxpayers facing a 15 percent marginal tax rate to 11.9 percent for those in the 39.6 percent tax bracket.

A tax on gains from home sales would discourage home sales in the same way that current law discourages taxpayers from selling other capital assets. In the case of home sales, such a tax might discourage workers from relocating to take advantage of better job opportunities. The tax might also deter some homeowners (especially older taxpayers with large accrued gains) from changing homes as family requirements change.

Another option would allow all taxpayers to exempt the first $125,000 of gains on all home sales from tax, but would fully tax the excess over that amount at the time of sale. That option would protect the mobility of most homeowners. Taxpayers who realize a gain of less than $125,000 on their first home could apply the unused portion to future home sales. That exclusion would increase the mobility of homeowners under age 55 relative to current law because they could move to homes of lesser value without incurring a tax as long as the gain on the home they sold was less than $125,000. Although this proposal would increase mobility for most homeowners, it would reduce it for those under age 55 whose gains from home sales exceed $125,000. Those taxpayers could no longer defer additional gain by purchasing a more expensive home.

Taxing gains on home sales without the rollover and exclusion that current law allows would increase

the need for taxpayers to keep records of home improvements. They would need to maintain such records to establish the tax basis of a home upon sale. Currently, many taxpayers do not keep such records because the probability of any future tax on gains from a home sale is low and the expected present value of such a tax is small. Allowing a lifetime exemption of $125,000 would complicate recordkeeping, especially when people buy and sell successive homes with different spouses.

Much of the capital gain on home sales results from inflation. Ideally, inflationary gains would not be subject to income taxation. Taxing inflationary gains may, however, be an appropriate way to offset the tax benefit homeowners enjoy from inflation by being able to deduct fully their mortgage interest payments, which include an inflation premium.

Including capital gains from the sale of a home in taxable income could argue for a change in the treatment of capital losses from home sales. Taxpayers generally may not deduct losses on home sales against gains from sales of future homes, gains from sales of other assets, or against other income. In contrast, taxpayers may deduct their capital losses from other assets against capital gains on other assets or, if they do not have gains in excess of losses, against up to $3,000 of other income. The vetoed Balanced Budget Act of 1995 would have allowed taxpayers to deduct all losses from home sales against other income, which would be more generous than the current treatment of losses from other assets. The options described here would continue to disallow the deduction of losses from home sales.

Any reduction in the tax benefit from home ownership would lower the value of existing housing relative to other assets such as corporate equity. Middle-income taxpayers particularly would feel the loss in value because homes are their principal asset.

As a way of reducing the tax benefit to home ownership, the primary alternative to taxing gains on sale is to limit the mortgage interest deduction (see REV-04). Limiting the mortgage interest deduction has the advantages of not hindering mobility or complicating recordkeeping. Taxing gains on sale, however, has the advantage of preserving the greatest tax benefit for first-time homebuyers.

REV-24 TAX CAPITAL GAINS HELD UNTIL DEATH

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Include Gains in the Last Income Tax Return of the Deceased[a]	b	13.2	13.8	11.8	9.5	9.9	58.2
Enact a Supplemental 10 Percent Estate Tax	b	1.5	1.6	1.4	1.1	1.2	6.8
Enact a Carryover Basis	b	1.0	2.0	3.1	4.3	5.5	15.9

SOURCE: Joint Committee on Taxation.

a. Estimates are net of reduced estate tax revenues.

b. Less than $50 million.

A capital gain or loss is the difference between the current value of an asset and the owner's basis. The owner's basis is the initial cost of the asset plus the cost of any subsequent improvements and minus any deductions for depreciation. When an asset is sold, tax law normally requires that the owner include any realized gain in taxable income. The owner can deduct any realized losses against realized gains, and when the owner does not have gains in excess of losses, he or she can deduct up to $3,000 of the loss against other income.

An exception occurs when an owner holds an asset until death. In that case, tax law allows the inheritor to "step up" the basis to the asset's value as of the date of the decedent's death. When the inheritor subsequently sells the asset, he or she pays tax on the gain that accrued after the decedent's death. The gain that accrued before the decedent's death is permanently excluded from taxable income. The estate of the decedent may pay taxes under the separate estate tax, but that tax applies equally to assets on which the decedent previously paid income tax and to assets with accrued capital gains that had escaped income taxation.

There are three ways to tax gains held at death: the law could require that gains held at death be included as income on the final income tax return of the decedent, the estate of the decedent could be subject to a supplemental tax rate on accrued gains, or the law could require that inheritors assume the decedent's basis in the asset they inherit. Under the last method of carryover basis, the inheritors would include the decedent's unrealized gain in their taxable income when they sold the asset.

Tax Gains on Final Return of the Decedent. Taxing accrued but unrealized gains on the final income tax return of the decedent would raise about $58 billion from 1997 through 2002. This option would exclude gains on assets that a spouse inherits. Instead, the spouse would assume the basis of the decedent and pay tax on the full gain only if he or she sold the asset. Any gains on assets that the decedent left to charity would also be exempt. The option would include gains on other assets in taxable income. It would also allow three additional modifications. First, to ease the problem of documenting the basis, the option would allow the estate to use an alternative basis equal to one-half of the asset's current value in computing the gain to be included on the final tax return. Second, the estate could claim the existing $125,000 exclusion on the gain from the sale of a principal residence if the decedent had not already claimed it. Third, the estate could exclude an additional $75,000 of any remaining gains. With all of those provisions, about 10 percent of decedents

would owe taxes on accrued gains on their final income tax return. Finally, taxes paid on gains realized at death would be deductible under the estate tax.

Tax Gains Under the Estate Tax. An additional estate tax on accrued gains of 10 percent would raise about $7 billion from 1997 through 2002. This option would apply a flat 10 percent rate to the same tax base as in the previous option. In addition, however, taxpayers could offset the additional tax with any unused credits under the estate tax. Because of those credits, few people would owe additional tax under this option. Only about 1 percent of estates currently pay the estate tax, and the fraction paying the additional tax on gains would be about the same.

Tax Gains Upon Realization by Heirs (Carryover Basis). A third option would carry over the decedent's basis in assets left to the heirs and tax the gains of the decedent when the heirs sold their assets. This option would raise roughly $16 billion from 1997 through 2002. The option would also allow heirs to set the basis of inherited assets at one-half of their current value. In addition, if the estate of the decedent paid any estate tax, shares of that tax would be added to the basis of all the estate's assets in proportion to their shares of the estate's value. Carryover basis would make most gains held at death taxable, but the timing of the tax payments would depend on when the heirs sold the inherited assets.

Gains held until death have always been exempt from income tax. The Congress enacted a carryover basis in the Tax Reform Act of 1976 but postponed it in 1978 and repealed it in 1980. Hence, it never took effect.

Taxing accrued gains at death, on either the last income tax return or the estate tax, would reduce the incentive for investors to hold assets until death in order to avoid tax. Current law encourages taxpayers to hold on to assets longer than they otherwise would. That "lock-in" effect distorts their investment portfolios and may hinder the flow of capital to activities with higher rates of return. Reducing the lock-in effect is one of the advantages of reducing the income tax on realized capital gains. Taxing gains at death would also reduce the lock-in effect, but, unlike a lower capital gains tax rate, it would reduce the preferential treatment of capital gains over ordinary income.

Using a carryover basis would not achieve the same unambiguous reduction of the lock-in effect that the other two options would achieve. Using a carryover basis lessens the incentive for the original owner to hold on to an asset until death. But an heir receiving an asset with a carryover basis has a stronger incentive to hold on to the asset than under current law.

A disadvantage of taxing gains at death is that the tax might force the family of the decedent to sell assets to pay the tax, although two of the three options minimize that problem. Forced sales of illiquid assets at an inopportune time can reduce their value substantially. Forcing heirs to sell a family farm or business would impose a particular hardship on families wanting to continue the enterprise. Forced sales would not occur if a carryover basis was used because heirs could defer the tax on unrealized gains until they sold the assets. In addition, taxing gains held at death through the estate tax would also reduce forced sales because the estate tax permits heirs who continue to operate a family farm or business to defer payment for five years and then spread payment over the next 10 years. Estates would receive no deferral, however, if gains were taxed on the final income tax return of the deceased. If that option was instead structured to allow the estate to value a family farm or business on its current use instead of by its market value, as is currently allowed under the estate tax, the option could allow a deferral and would raise less revenue than estimated here.

Taxpayers and the Internal Revenue Service often have difficulty determining the basis of assets of closely held businesses, personal property, and assets for which the taxpayer did not keep adequate records. The difficulty in determining the amount of the basis was one of the main arguments that influenced the Congress to delay implementing carryover basis in 1978 and then to repeal it in 1980. Because people currently planning to hold assets until death might not have kept adequate records, documenting the basis would be particularly difficult immediately after passage of a law to tax gains held until death. Once a tax on gains held at death had taken effect, however,

people would have a reason to keep better records. In the interim, allowing estates and heirs to set the basis at one-half of the market value at the time of death would ease compliance. Finally, if gains held at death were taxable under the estate tax instead of the income tax, most estates would be exempt because of the high estate tax credit (see REV-25).

In 1995, the Congress passed and the President vetoed legislation to raise the value of assets excludable from the estate tax. That legislation also provided a larger exclusion for family-held businesses. If the legislation became law, revenues raised by taxing gains through the estate tax would be lower than shown above, and the burden on family businesses would be lessened.

REV-25 INCREASE ESTATE AND GIFT TAXES

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Reduce the Unified Credit	a	4.5	4.9	5.4	6.0	6.6	27.4
Convert the Credit for State Death Taxes into a Deduction	a	1.7	1.8	2.0	2.3	2.5	10.3
Include Life Insurance Proceeds in the Base	a	0.4	0.4	0.5	0.5	0.6	2.4

SOURCE: Joint Committee on Taxation.

a. Less than $50 million.

Current law imposes a gift tax on transfers of wealth during a taxpayer's lifetime and an estate tax on transfers at death. The estate and gift taxes together constitute a unified tax: one progressive tax is imposed on cumulative transfers during life and at death. Generous credits built into the system, however, exempt most estates from taxation; about 32,000 estates paid tax in 1994.

Although the estate and gift tax applies to all transfers of wealth, a unified credit of $192,800 effectively exempts the first $600,000 from taxation. As a result of the credit, taxable estates face tax rates ranging from 37 percent on the first $150,000 of transfers in excess of $600,000 to 55 percent on transfers in excess of $3 million. An additional 5 percent surcharge applies to estates between $10 million and $21.04 million. The 5 percent surcharge phases out the benefit of graduated rates for those larger estates. In addition, current law phases out the unified credit for estates above $10 million. Another credit allows taxpayers to subtract a portion of state death taxes from federal estate tax liability.

In the Omnibus Budget Reconciliation Act of 1993, the Congress made permanent the top two estate tax rates that had been scheduled to decline to 50 percent after 1992. Those are the 53 percent rate that applies to estates of between $2.5 million and $3 million and the 55 percent rate that applies to estates of more than $3 million. The Congress could raise the estate and gift tax, without raising rates, by reducing allowable credits or by including proceeds of life insurance policies in the tax base.

Reduce the Unified Credit. Lowering the unified credit from $192,800 to $87,800 would raise about $27 billion from 1997 through 2002 and would cause about 35,000 additional estates to pay tax. That lower credit is equivalent to an exemption of the first $300,000 of transfers, instead of the current $600,000.

The estate and gift tax reduces the extent to which concentrations of wealth can be perpetuated, which may provide more equal opportunity for members of each new generation. The tax may also slow economic growth, however, by discouraging the accumulation of large estates.

The estate and gift tax provides the only tax on the unrealized capital gains held until death by people with the highest-valued estates. The estate and gift tax, however, taxes those unrealized gains at the same rate as other accumulated wealth that has already been taxed as income when earned (see REV-24).

Reducing the unified credit would extend the tax to more estates with small businesses, family farms, and large homes. The necessity of paying the tax would put pressure on heirs to sell those assets when

they might prefer to retain them in the family or when the value of the assets was temporarily depressed. However, the estate tax has provisions for spreading payment over 15 years for small businesses and family farms, but even that burden could be prohibitive for retaining some family assets. Reducing forced liquidation of assets was one concern of the Congress when it voted in 1981 to raise the credit from $47,000 to $192,800. Furthermore, a provision in the Balanced Budget Act of 1995, vetoed by the President, would have raised the unified credit to $248,300 by 2001 and indexed it to inflation thereafter. Such a change would be equivalent to an exemption of the first $750,000 of transfers, instead of the current $600,000.

Convert the Credit for State Death Taxes into a Deduction. Currently, state death taxes reduce federal tax liability by a credit that ranges from 0.8 percent on transfers of $40,000 to 16 percent on transfers of more than $10 million. When enacted in 1926, the credit sometimes virtually eliminated federal tax liability because the top marginal rate on estate and gifts taxes was 20 percent. The credit acts as a state revenue-sharing system for estates taxed up to the 16 percent exclusion level. Consequently, a majority of states have adopted death tax systems that simply redistribute estate tax revenues from the federal to state governments. That shift is accomplished by imposing state taxes that exactly match the amount of the federal credit. Changing the state death tax credit to a deduction would raise about $10 billion from 1997 through 2002 and would correspond to the itemized deduction that taxpayers receive for state and local income and property taxes.

An alternative change that yields about the same revenue is to reduce the amount of state tax credited by half so that the maximum credit is 50 percent of the amount paid to states. The two alternatives are not equivalent for estates of different sizes: the value of the deduction increases as the marginal tax rate rises, whereas the value of the credit is not affected by the marginal tax rate.

Include Life Insurance Proceeds in the Base of the Estate and Gift Tax. Life insurance is an alternative way of transferring wealth to descendants, but is currently exempt from the estate tax if the policyholder is someone other than the person who died. Making life insurance proceeds subject to estate and gift tax would raise $2.4 billion from 1997 through 2002.

REV-26 AMORTIZE A PORTION OF ADVERTISING COSTS

	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Revenues	4.0	7.1	5.4	3.5	2.1	1.7	23.8

SOURCE: Joint Committee on Taxation.

The income tax law allows taxpayers to deduct the ordinary costs of doing business. When a taxpayer purchases a durable asset for use in business, however, the expense may not normally be deducted immediately. Taxpayers must spread out (amortize) deductions over a number of years as the asset depreciates in value. That requirement is intended to match the timing of the deductions for depreciation with the timing of income earned from using the asset in business.

The rate at which such deductions are allowed, the "depreciation schedule," is normally faster than the rate at which an asset actually depreciates. For example, when a machine is expected to last 10 years, the depreciation schedule might allow the original cost to be deducted over five years. The sooner the deductions, the lower the effective rate at which income earned from using the asset is taxed. In the extreme, if the initial cost of a durable asset was deducted immediately, the net income from the asset would effectively not be taxed at all.

Currently, businesses may deduct advertising expenses in the year they are incurred. The benefits of advertising, however, may extend beyond the current year because advertising can create brand recognition or otherwise increase the demand for a business's products or services in later years. If advertising creates a durable asset, the immediate deduction allowed by current law provides it with a preference relative to investment in other durable assets.

Under this option, businesses could deduct 80 percent of all advertising expenses immediately but would have to amortize the remaining 20 percent equally (using a "straight line" method) over four years. The option might improve the match between the deductions and the income created from advertising. This option would raise about $24 billion from 1997 through 2002. After peaking at $7 billion in 1998, the estimated revenue gain would diminish to under $2 billion by 2002 because the option represents an acceleration of tax revenue that would otherwise be paid in later years.

Because advertising can be difficult to define, this option would require complex rules to distinguish advertising costs from other ordinary business costs. Some marketing costs, such as those of notifying customers about price changes, redesigning a product package, or changing store displays, might or might not fit within the definition of advertising. If advertising was defined too narrowly, the depreciation requirement would be easy to avoid and difficult to administer. If advertising was defined too broadly, however, it would place an unintended burden on some forms of marketing.

The option would increase the after-tax cost of advertising and discourage its use. However, advertising also fulfills important economic functions by supplying information about products to prospective buyers. Advertising often provides information about prices, making it easier for buyers to find the lowest price, which can make markets more competitive. Advertising can also provide valuable information about the quality and other characteristics of products, making it easier for buyers to make good purchasing decisions.

Available research provides conflicting evidence about the durability of advertising. The actual rate at which advertising depreciates is unknown and differs for different types of advertising. The depreciation schedule chosen under any option is necessarily arbitrary. If the depreciation period was too long under the option, advertising would be overtaxed relative to other economic activities, which would discourage economically important forms of advertising.

REV-27 ELIMINATE PRIVATE-PURPOSE, TAX-EXEMPT BONDS

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Eliminate All Private-Purpose, Tax-Exempt Bonds	0.1	0.6	1.2	1.7	2.1	2.6	8.3
Raise the Cap and Extend Limits on Volume to New Issues of All Private-Purpose Bonds	a	0.2	0.4	0.6	0.8	1.0	3.0

SOURCE: Joint Committee on Taxation.

a. Less than $50 million.

Tax law permits state and local governments to issue bonds that are exempt from federal taxation and thus bear lower interest rates than taxable bonds. For the most part, the bonds' proceeds have financed public investments such as schools, highways, and water and sewer systems. Beginning in the 1960s, however, state and local governments began to issue a growing dollar volume of tax-exempt bonds to finance quasi-public facilities, such as ports and airports, and private-sector projects, such as housing and shopping centers. Those bonds eventually became known as "private-purpose" bonds because the beneficiaries of the tax-exempt borrowing were private, nongovernmental entities.

Private-purpose, tax-exempt bonds include mortgage bonds for rental housing and single-family (in some cases two-family) homes; bonds for exempt facilities, such as airports, docks, wharves, mass transit, and solid waste disposal; small-issue bonds for manufacturing facilities and agricultural land and property for first-time farmers; student loan bonds, which state authorities issue to increase funds available for guaranteed student loans; and bonds for nonprofit institutions, such as hospitals and universities.

Although private-purpose bonds provide subsidies for activities that may merit federal support, tax-exempt financing is not the most efficient way to provide assistance. With a direct subsidy, the benefit would go entirely to the borrower; with tax-exempt financing, the borrower of funds shares the benefit with the investor in tax-exempt bonds. In addition, because tax-exempt financing is not a budget outlay, the Congress may not routinely review it as part of the annual budget process.

The Congress has placed restrictions on tax-exempt financing several times, beginning in 1968. During the 1980s, those restrictions included limiting the volume of new issues of tax-exempt bonds for some activities and eliminating or setting expiration dates on the use of tax-exempt bonds for other facilities. The Congress, however, frequently postponed some of the expiration dates. In the Omnibus Budget Reconciliation Act of 1993, the Congress permanently extended the use of mortgage bonds for single-family (and some two-family) homes and the use of small issues for manufacturing facilities and agricultural land and property for first-time farmers.

The Tax Reform Act of 1986 included interest earned on newly issued private-purpose bonds in the base for the alternative minimum tax and placed a single state-by-state limit on the volume of new issues of exempt facility bonds, small issues, student loan bonds, and housing and redevelopment bonds. Those state limits on volume are the greater of $50 per resident or $150 million a year. Bonds for publicly owned airports, ports, and solid waste disposal

facilities and bonds for nonprofit 501(c)(3) organizations (primarily hospitals and educational institutions) are exempt from the limits on issues of new bonds. However, large private universities and certain other nonprofit institutions may not issue tax-exempt bonds if they already have more than $150 million in tax-exempt debt outstanding.

If the Congress eliminated tax exemption for all new issues of private-purpose bonds, the gain in revenue would be about $8 billion in 1997 through 2002. That amount assumes that at least some construction of airports and sewage and solid waste facilities would qualify for tax-exempt financing because they are governmental in nature. Eliminating the tax exemption would eventually raise the cost of the services provided by nonprofit hospitals and other facilities that currently qualify for tax-exempt financing, but it would also result in more efficient allocation of resources.

Including all bonds for private nonprofit and quasi-public facilities under a single state limit on volume--while raising the limits beginning in 1997 to, say, $75 per capita or $200 million a year--would increase revenues by $3 billion in 1997 through 2002. Those changes would curb the growth of all private-purpose bonds without sharply reducing their use. The curb would primarily affect bond issues for nonprofit hospitals, which are not included in the current cap. The proposal would also apply to bonds for airport facilities, such as departure gates, that are for the exclusive private use of airlines under long-term leases, but would continue to allow unlimited tax-exempt financing of public airport facilities, such as runways and control towers.

REV-28 REDUCE TAX CREDITS FOR REHABILITATING BUILDINGS

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Repeal Credit for Nonhistoric Structures and Reduce Credit for Historic Structures to 15 Percent	a	0.1	0.1	0.1	0.1	0.1	0.5
Repeal Both Credits	0.1	0.2	0.2	0.2	0.2	0.2	1.1

SOURCE: Joint Committee on Taxation.

a. Less than $50 million.

The Congress enacted tax credits for rehabilitation to promote the preservation of historic buildings, encourage businesses to renovate their existing premises rather than relocate, and encourage investors to refurbish older buildings. The credit rate is 10 percent for expenditures on commercial buildings built before 1936, and 20 percent for commercial and residential buildings that the Department of the Interior has certified as historic structures because of their architectural significance.

The credits favor commercial use over most rental housing and may therefore divert capital from more productive uses. Moreover, in favoring renovation over new construction, the credits may encourage more costly ways of obtaining additional housing and commercial buildings.

Rehabilitation may have social benefits when it discourages the destruction of historically noteworthy buildings. The government could promote that objective at a lower cost, however, by permitting a credit only for the renovation of certified historic buildings and lowering the credit rate. Some surveys indicate that a 15 percent credit would be sufficient to cover the extra costs of both obtaining certification and undertaking rehabilitation of historic quality. Reducing the credit for historic structures to 15 percent and repealing the credit for nonhistoric structures would increase revenues over the 1997-2002 period by about $0.5 billion. Repealing both credits would raise about $1.1 billion over the same period.

REV-29 REPEAL THE POSSESSIONS TAX CREDIT

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Repeal the Credit	1.1	2.4	2.5	2.6	2.8	3.0	14.4
Phase Out the Credit	0.3	0.6	0.6	0.5	0.5	0.7	3.2

SOURCE: Joint Committee on Taxation.

The U.S. income tax treats income of U.S. corporations operating in Puerto Rico or any other U.S. possession as foreign-source income. Ordinarily, foreign-source income is subject to U.S. tax less a credit for foreign taxes paid. A "possessions corporation," however, may claim a possessions tax credit instead of the foreign tax credit. The possessions tax credit effectively exempts some or all of the income of possessions corporations from federal income tax, even though Puerto Rico and other possessions assess tax on such corporations at much lower rates than the United States. A U.S. corporation may elect to be a possessions corporation if at least 80 percent of its gross income comes from sources within Puerto Rico or another U.S. possession and if at least 75 percent of its income comes from the active conduct of a trade or business rather than from passive financial investments.

The possessions tax credit was intended to promote employment in U.S. possessions, but its cost-effectiveness has been criticized. In particular, for pharmaceutical manufacturers, who received about half of possessions tax credits in 1989, the primary effect of the credit was to shelter the income generated by profitable drug patents from U.S. tax. As a result, the Internal Revenue Service estimated that the tax benefits averaged over 200 percent of labor compensation for drug manufacturers, and over 100 percent of labor compensation for all Puerto Rican possessions corporations.

In response to concerns about the cost-effectiveness of the possessions tax credit, the Omnibus Budget Reconciliation Act of 1993 scaled back the credit for companies whose income primarily derived from intangible assets such as drug patents. Under the new rules, the possessions tax credit is subject to one of two limits. Firms may choose a limit on the credit based on wages and depreciation costs or a limit based on a percentage of the old credit. The percentage under the second limit will phase down to 40 percent by 1998. The change is unlikely to affect companies with substantial employment costs, buildings, machinery, and equipment because their possessions tax credit is less than the first limit. But corporations with few employees and little physical capital who elect the first limit have an incentive to hire more workers and purchase more physical capital because their allowable credits increase when they make such tangible expenditures, though not if they accumulate more intangible capital.

Budget savings would result from two options to repeal the tax credit. First, immediate repeal would increase revenues by about $14 billion over six years. Alternatively, the credit could be phased out. To ease the disruption on the Puerto Rican economy from total, immediate repeal, the vetoed Balanced Budget Act of 1995 would have repealed the entire credit effective in 2002, with limits placed on credits for business income in the intervening years. It would have immediately repealed only the credit for passive investment income. Under that second alternative, repeal would increase revenues by about $3 billion over six years. The President's budget for fiscal year 1997 proposes a more limited phaseout of the credit than the two options presented here. Under

the President's proposal, the revenue raised from phasing out the credit would be made available to Puerto Rico, not used to reduce the deficit.

The possessions tax credit has been assailed as an example of corporate welfare that should be repealed. It provides a tax benefit for corporations doing business in Puerto Rico that corporations operating in the states or another country do not get. Because of the subsidy, capital invested in Puerto Rico is likely to be less productive than capital invested elsewhere.

Nevertheless, many analysts believe that the possessions tax credit has been an important factor in the postwar transformation of the Puerto Rican economy from an agrarian to a highly industrialized economy. Wages in Puerto Rico are probably higher than they would be without the infusion of capital spurred by the tax credit. Repealing the credit would most likely cause some U.S. companies to move their operations elsewhere, either to other countries or to the mainland. Moreover, the Puerto Rican economy would probably suffer, at least in the short run.

REV-30 DISALLOW INTEREST DEDUCTIONS FOR CORPORATE-OWNED LIFE INSURANCE LOANS

	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Revenues	1.1	1.5	1.6	1.7	1.8	1.9	9.6

SOURCE: Joint Committee on Taxation.

Corporations purchase life insurance policies in part as protection against the financial loss from the death of their more important employees. Those purchases provide a tax benefit when corporations take out a loan with the cash value of the policy as collateral and deduct the interest expense from taxable income. This option would disallow the deduction for interest that corporations pay on loans secured by the cash value of life insurance policies. It would raise almost $10 billion over the 1997-2002 period.

The tax code makes the tax benefit available by allowing the investment income ("inside buildup") within a life insurance policy to be generally exempt from the corporate income tax, while allowing a corporation to deduct a significant share of the associated loan's interest expense from taxable income. Such asymmetric treatment provides an opportunity for tax arbitrage in that corporations can generate interest deductions that they can use to shelter other taxable income. Individuals cannot use that tax benefit because the tax code does not allow them to deduct those interest payments. Corporations that pay the alternative minimum tax receive only a limited opportunity for tax arbitrage because merely a part of their inside buildup is exempt from income tax. Those corporations, therefore, tend not to purchase such insurance policies for tax purposes.

The Congress enacted restrictions on this tax benefit in the Tax Reform Act of 1986. However, the restrictions have not been particularly effective. In that act, the Congress restricted the size of a loan that qualifies for the interest deduction to $50,000 per insured employee. Since that time, corporations have spread smaller policies over a larger group of employees.

This option would broaden the restrictions enacted in 1986 by denying the deduction by corporations of interest from all life insurance policy loans, regardless of the size and date of the loan. The Bush Administration proposed this option in its budget for fiscal year 1993, and the Reagan Administration had proposed it in 1984. The Congress adopted a phased-in repeal of the tax benefit in the vetoed Balanced Budget Act of 1995, allowing a limited exception for insurance on the lives of the most important employees of a business. If the Congress was to tax all investment income from cash-value life insurance as it accrued (the option depicted in REV-16), then restricting the interest deductibility of policy loans would be unnecessary.

REV-31 REPEAL THE LOW-INCOME HOUSING CREDIT

	Annual Added Revenues (Billions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Addition to Current-Law Revenues	0.1	0.3	0.7	1.0	1.4	1.8	5.3

SOURCE: Joint Committee on Taxation.

The low-income housing credit (LIHC) subsidizes the construction and substantial rehabilitation of low-income rental housing. Individuals and corporations who qualify for the LIHC receive tax credits over a 10-year period that are worth up to 70 percent, measured in present value, of the construction or rehabilitation costs of qualifying projects. The percentage is limited to 30 percent for projects that receive other federal subsidies.

To qualify for the LIHC, project owners must set aside at least 20 percent of rental units for families whose income is below 50 percent of area median income, or 40 percent of units for families whose income is below 60 percent of median income. Rents are restricted. The set-aside and rent restrictions apply for at least 15 years. State housing agencies allocate the credits subject to statutory limits.

The low-income housing credit will reduce federal revenue by $2.6 billion in 1996 and is estimated to grow to $3.9 billion by 2000. Repealing the tax credit for new projects would raise $5.3 billion from 1997 through 2002.

Housing assistance could be provided to the same number of people at lower cost if the assistance was provided in the form of an expanded housing voucher program. Low-income tenants can use housing vouchers to pay for all or part of the rent for the housing of their choice, as long as it meets minimum standards for habitability. By contrast, the low-income housing credit subsidizes only new and substantially rehabilitated housing, which is the most expensive kind of housing.

High overhead costs also make some housing subsidized by the LIHC even more expensive to produce and rent. Private investors in low-income housing syndicates require high rates of return to compensate for the inherent risk of such investments, as well as the specific risks imposed by the credit itself. For example, projects that fail to comply with the requirements of the program may be subject to heavy penalties. Also, some investors cannot use the credits every year because of the limits on passive losses and on the use of business tax credits. Moreover, the administrative and marketing costs in organizing low-income housing syndicates are high, averaging 20 percent of project costs in some cases.

Advocates of the LIHC argue that it, in combination with subsidies such as rental assistance under section 8 of the United States Housing Act of 1937, assists many poor families and can be an important part of neighborhood revitalization efforts. In addition, affordable housing that meets minimal housing standards is in short supply in some areas with low-income families. For those reasons, a supply subsidy such as the LIHC might be a more effective policy tool than a demand subsidy such as housing vouchers. In addition, advocates argue that lower-middle-income people who benefit from the credit are neglected by traditional housing programs, which primarily assist poor families. Moreover, they believe that state governments, which allocate the credits, are better able to assess the housing needs of their communities than a federal bureaucracy.

Although providing support for low-income housing through housing vouchers instead of the

LIHC could potentially provide assistance to the same number of families at lower cost, budget constraints on discretionary spending might make it difficult to repeal the credit in favor of an expanded voucher program funded by annual appropriations. The discretionary spending limits of the Balanced Budget and Emergency Deficit Control Act of 1985 (as amended in 1990 and 1993) already impose severe constraints on funding for existing discretionary programs. Expanding the housing voucher program would subject those programs to even greater budgetary pressures.

REV-32 REPEAL THE TAX PREFERENCE FOR BAD-DEBT RESERVES OF THRIFT INSTITUTIONS

	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Revenues	0.1	0.1	0.2	0.3	0.3	0.3	1.3

SOURCE: Joint Committee on Taxation.

When businesses calculate their taxable income under the corporate income tax, they deduct the value of the losses they incur when customers do not repay loans. Compared with the treatment provided to other financial institutions, the Internal Revenue Code provides thrift institutions--primarily savings and loan institutions and savings banks--with preferential treatment for those deductions for bad debts, as long as the thrifts concentrate their activities on residential mortgage lending. Repealing that tax preference--as the Congress did in the vetoed Balanced Budget Act of 1995--would raise about $1.3 billion in revenues over the next six years.

Financial institutions other than thrifts must use one of two methods to measure their deductions for bad debts. Under the "specific charge-off method," large commercial banks and all other institutions may deduct the losses only when the loans are deemed worthless. In addition to that method, the tax code allows small banks--those with assets of less than $500 million--to use the "experience method," which allows a proportion of current loans to be deducted as an addition to a "bad-debt reserve" account. The proportion calculated by each bank is based on its average rate of losses over a recent period. Because it allows a tax deduction before a loss is actually identified, the experience method is more favorable than the specific charge-off method and is considered a tax preference in its own right.

The tax code allows thrifts to use a third method as well, in which they make tax-deductible additions to a bad-debt reserve, as the experience method allows. But the addition is related to net income, not to any measure of debt, good or bad. Thrifts may add 8 percent of their taxable income--computed excluding any deduction for bad debts and with other generally small adjustments--to the reserve account and then deduct that amount from taxable income. If a thrift's net income is high compared with its actual losses from bad debts, the "percentage of taxable income method" may provide much larger deductions for bad debts than either of the two other methods would allow. The excess of the deduction taken under the percentage of taxable income method over the deduction allowed under the specific charge-off method is included in the taxable income of thrifts for purposes of the alternative minimum tax (AMT). As a result, the tax benefit is reduced for those thrifts that must pay the AMT. (See REV-01). (The AMT also reduces the smaller tax benefit generated by using the experience method.)

The tax law for thrifts and commercial banks developed along different paths. Thrifts were exempt from corporate income taxation until 1952, when they were deemed to be more like other profit-seeking corporations than nonprofit mutual associations. For the decade after 1952, however, thrifts were allowed special deductions for bad debts that essentially kept them tax-exempt. In successive legislation enacted in 1962, 1969, and 1986, the Congress reduced the thrifts' tax preference for bad debts to the level at which it stands today. Commercial banks, however, have never been exempt from the corporate income tax, although large as well as small banks were allowed to use the advantageous experience method of accounting for bad debts until the Tax Reform Act of 1986 repealed its use by large banks.

Because thrifts historically developed as the primary provider of home mortgages, federal policy in support of home ownership has operated in part by aiding thrifts. For many years, thrifts benefited from interest rate caps on deposits--set higher for thrift deposits than for bank deposits. They still benefit from access to low-cost funds from the Federal Home Loan Bank System, as well as from the tax benefit for bad debts. Moreover, other federal tax policies have supported homeowners more directly, such as deductions for mortgage interest (see REV-04) and local property taxes (see REV-05), as well as certain exclusions of capital gains on home sales (see REV-23).

Over the past several decades, the development of the secondary market for mortgages and ongoing deregulation of the financial industry have helped to erode the unique role of thrifts in providing housing finance. The rapidly growing secondary market for mortgages, which efficiently links investors with borrowers, has pushed thrifts and other financial institutions into competition largely as originators of mortgages rather than as the primary long-term holders of them. In addition, certain aspects of deregulation, such as the removal of both the deposit interest caps and limits on the types of deposits that thrifts could accept, have fostered direct competition between thrifts and other financial institutions.

With thrifts and other financial institutions now competing directly, the tax preference for thrifts encourages more thrifts and fewer other financial institutions to exist than would otherwise be the case. That result reduces economic efficiency when other financial institutions could otherwise provide the same mortgage services at lower cost. Some of those other institutions, such as mortgage companies, might have lower costs than thrifts because they do not need to provide the same services as thrifts, such as accepting deposits, which are subject to costly reserve requirements, deposit insurance premiums, and possibly higher administrative costs.

In recent months, the Congress has considered legislation to restructure the thrift industry. It has considered revoking the federal thrift charter and merging the thrift and bank deposit insurance funds. The Balanced Budget Act of 1995, vetoed by President Clinton, would have repealed the thrifts' tax preference for bad debts and required them instead to use the accounting methods that banks use. Thrifts with assets of less than $500 million, such as similar-sized banks, could use the experience method, but all others would have to use the specific charge-off method. The provision would have recaptured a portion of past tax benefits by requiring thrifts to include in taxable income (over a six-year period) all post-1987 additions to the bad-debt reserve in excess of bad debt under the accounting methods that banks use. The provision would have granted a two-year suspension of the tax increase for any thrift that maintained a substantial amount of its recent mortgage lending. The option estimated here reflects the version that the Congress passed in 1995.

REV-33 TAX CREDIT UNIONS LIKE OTHER THRIFT INSTITUTIONS

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Tax All Credit Unions	0.6	0.9	0.9	0.9	1.0	1.0	5.3
Tax Credit Unions with More Than $10 Million in Assets	0.5	0.8	0.8	0.8	0.9	0.9	4.7

SOURCE: Joint Committee on Taxation.

Credit unions are nonprofit institutions that provide their members with financial services such as accepting deposits and making loans. The federal income tax treats credit unions more favorably than competing thrift institutions, such as savings and loan institutions and mutual savings banks, by exempting their retained earnings from tax. As a result, more credit unions and fewer taxable thrifts exist than would otherwise be the case. That situation reduces economic efficiency in that competing institutions might otherwise provide the same services but at a lower cost.

Credit unions, savings and loans, and mutual savings banks were originally all tax-exempt, but in 1951 the Congress removed the tax exemptions for savings and loans and mutual savings banks. It considered them to be more like profit-seeking corporations than nonprofit mutual associations.

Since 1951, credit unions have come to resemble those other thrift institutions in certain respects. Credit unions no longer limit membership to people sharing a common bond, which was usually employment. Since 1982, the regulators have allowed credit unions to extend their services to others, including members of other organizations. In addition, most credit unions allow members and their families to participate permanently, even after members have left the sponsoring organization. Credit union membership has grown from about 5 million in 1950 to almost 70 million today. That leap in numbers offers evidence that credit unions, like taxable thrifts, now serve the general public. In addition, credit unions retain earnings like thrift institutions. Credit unions argue that they retain earnings as protection against unexpected events, but other thrift institutions argue that credit unions use the retained earnings to finance expansion. Moreover, credit unions are becoming more like savings and loans and mutual savings banks in the services they offer. A significant number of credit unions offer such services as first and second mortgages, direct deposit, access to automatic tellers, preauthorized payments, credit cards, safe deposit boxes, and discount brokerage services.

Many smaller credit unions, however, retain the characteristics of nonprofit mutual organizations and perhaps should not be subject to taxation. For instance, only volunteers from the membership manage and staff some of those credit unions. Moreover, many of those smaller credit unions do not expand their membership beyond their immediate common bond or provide services comparable to competing thrift institutions. To protect those smaller credit unions, the Congress could choose to exempt from taxation those credit unions with assets below $10 million. Such an action would exempt about two-thirds of all credit unions from taxation, although they hold only about 8 percent of all assets in the credit union industry.

Taxing all credit unions like other thrift institutions would raise $5.3 billion in 1997 through 2002. Taxing only credit unions with assets above $10 million would raise about $0.6 billion less.

REV-34 REPEAL TAX PREFERENCES FOR EXTRACTIVE INDUSTRIES

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Repeal Expensing of Exploration and Development Costs	0.6	1.0	0.8	0.7	0.7	0.6	4.4
Repeal Percentage Depletion	0.2	0.4	0.4	0.4	0.5	0.5	2.4

SOURCE: Joint Committee on Taxation.

The current tax system favors extractive industries (oil, gas, and minerals producers) over most other industries through two types of tax preferences. First, certain exploration and development costs incurred by extractive producers may be immediately deducted ("expensed") rather than recovered more slowly through deductions for depreciation. Second, certain types of extractive companies (independent producers and royalty owners) may elect to use the "percentage depletion" method to recover costs rather than the standard "cost depletion" method. Under percentage depletion, cumulative depletion deductions may exceed actual costs of investment. As a result, the tax system subsidizes production.

Eliminating those two tax preferences would improve the allocation of resources while raising significant revenue. Repealing the expensing of exploration and development costs would raise $4.4 billion in 1997 through 2002, assuming that firms could still expense costs from unproductive holes and mines. Repealing the percentage depletion would raise $2.4 billion over the same six-year period.

Repeal Expensing. Certain types of oil and gas producers and producers of hard minerals may deduct some exploration and development costs at the time such costs are incurred rather than over time as the resulting income is generated. That immediate deduction of costs contrasts with the normal tax treatment facing other industries, in which costs are deducted more slowly according to prescribed rates of depreciation or depletion. The Tax Reform Act of 1986 established uniform capitalization rules that require certain direct and indirect costs allocatable to property to be either deducted when inventory is sold or recovered over several years as depreciation deductions (so that any deduction of costs is postponed to the future). However, intangible drilling and development costs and mine development and exploration costs are exempt from those rules. Thus, the expensing of such costs results in a tax preference for extractive industries that does not exist for most other industries.

Expensible exploration and development costs include costs for excavating mines and drilling wells. They also include prospecting costs for hard minerals but not for oil and gas. Although current law allows full expensing for independent oil and gas producers and noncorporate mineral producers, it limits expensing to 70 percent of costs for "integrated" oil and gas producers (companies involved in substantial retailing or refining activities) and corporate mineral producers. Firms subject to the 70 percent limit must deduct the remaining 30 percent of costs over a 60-month period.

Repeal Percentage Depletion. The percentage depletion method of cost recovery allows certain types of extractive companies (independent producers and royalty owners, or "nonintegrated" companies) to deduct a certain percentage of a property's gross income in each taxable year, regardless of the actual capitalized costs. In contrast, other industries (and since 1975, integrated oil companies as well) use the

cost depletion method. Under cost depletion, the costs recovered cannot exceed the taxpayer's expenses in acquiring and developing the property. But under percentage depletion, they may. Thus, the percentage depletion method results in a tax preference for certain types of extractive companies that does not exist for other companies. Unlike the expensing of exploration and development costs, however, percentage depletion applies only to a small subset of total oil, gas, and minerals production because it excludes the large integrated producers.

Current law typically allows nonintegrated oil and gas companies to deduct 15 percent of the gross income from oil and gas production up to 1,000 barrels per day. The Omnibus Budget Reconciliation Act of 1990 made percentage depletion even more generous, however, for those nonintegrated companies that are considered to be "marginal" producers (those with very low total production or production that is entirely made up of heavy oil). The deduction for marginal properties can be up to 25 percent of gross income if the market price of oil drops low enough.

Producers of hard minerals may also use percentage depletion, but the statutory percentages vary. Minerals eligible for percentage depletion include, but are not limited to, sand (5 percent), coal (10 percent), rock asphalt (14 percent), iron ore (15 percent), oil shale (15 percent), gold (15 percent), and uranium (22 percent). Tax law limits the amount of percentage depletion to 100 percent of the net income from an oil and gas property and 50 percent of the net income from a property with hard minerals.

Economic Inefficiency Associated with the Preferences. Both expensing and percentage depletion were established in the early part of this century. Although the original rationale for expensing was that the costs of exploration and development were considered ordinary operating expenses, continuing both types of preferences has been justified on the grounds that oil and gas are "strategic minerals," essential to national energy security.

However, expensing and percentage depletion distort the efficient allocation of resources in several ways. First, the preferences cause resources to be overallocated to drilling and mining, when some of those resources might be used more productively elsewhere in the economy. Second, although the preferences might reduce dependence on imported oil in the short run, they encourage current extraction, perhaps at the cost of reduced future extraction and greater future reliance on foreign production. Third, the preferences may result in an inefficient allocation of production within those extractive industries, since the subsidies are not systematically related to the economic productivity of investments. For example, percentage depletion is a subsidy according to gross income and not according to investment. Thus, it encourages developing existing properties over exploring for new ones. As another example, producers who pay the alternative minimum tax must defer or even forgo both types of preferences, regardless of the economic productivity of their investments.

REV-35 CAPITALIZE THE COSTS OF PRODUCING TIMBER

	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Revenues	0.3	0.5	0.5	0.5	0.4	0.4	2.6

SOURCE: Joint Committee on Taxation.

The current tax system allows timber producers to deduct immediately ("expense") most of the production costs of maintaining a timber stand. That tax treatment contrasts with the uniform capitalization rules applied to most other industries. Established under the Tax Reform Act of 1986, such rules require that production costs not be deducted until the sale of the produced goods or services. When businesses do not account for costs properly, business income is not measured correctly because the costs of producing goods and services are not matched with the sale of the goods and services.

Although the costs of planting a timber stand are in fact subject to capitalization rules, subsequent maintenance and production costs are not. Timber producers can expense indirect carrying costs, such as property taxes, interest, insurance costs, and administrative overhead, as well as the costs of labor and materials to remove unwanted trees and to control fire, disease, and insects. By allowing timber producers to deduct such production costs before the timber is harvested or sold, the tax code in effect subsidizes timber production by deferring tax that producers otherwise would owe on their income. (Under certain circumstances, however, the deferral granted to noncorporate producers of timber may be greatly curtailed by the limits of the tax code on losses from passive business activities.)

The original rationale for expensing timber production costs was a general perception that such costs were maintenance costs and thus deductible as ordinary costs of a trade or business. When the Tax Reform Act of 1986 established uniform capitalization rules, the costs of producing timber were exempted, as were the exploration and development costs associated with oil, gas, and minerals production (see REV-34). The general reason given for those exemptions was that applying the rules to those industries might have been unduly burdensome.

Expensing timber production costs distorts investment behavior in two ways: more private land is devoted to timber production, and trees are allowed to grow longer before they are cut. Unless timber growing offers spillover benefits to society that are not captured by market prices, the tax preference leads to an inefficient allocation of resources and an inefficient harvesting rate.

Whether or not timber production offers important spillover benefits is unclear. Standing timber provides some spillover benefits by deterring soil erosion and absorbing carbon dioxide (a gas linked to global warming), but cutting timber can lead to soil erosion. In addition, producing and disposing of wood and paper products contribute to pollution.

Capitalizing the costs of timber production incurred after December 31, 1996, would raise $2.6 billion in revenue from 1997 through 2002 by accelerating tax payments from timber producers. In the long run, capitalizing timber production costs would raise the price of domestic timber and lower the value of land used to grow timber. Moreover, lease payments to private landowners by timber growers would probably fall, causing some land that historically has been devoted to growing timber to be used in other ways. In the short run, however, capitalizing timber production costs might lower the price of domestic timber because producers would have an incentive to harvest timber earlier.

REV-36 REPEAL THE PARTIAL EXEMPTION FOR ALCOHOL FUELS FROM EXCISE TAXES ON MOTOR FUELS

	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Revenues	0.4	0.5	0.5	0.5	0.5	0.5	2.9

SOURCE: Joint Committee on Taxation.

NOTE: Estimates are net of reduced income and payroll tax revenues.

The tax code imposes excise taxes on motor fuels, but it partially exempts fuels that are certain blends of gasoline and alcohol. Repeal of the partial excise tax exemption would raise nearly $3 billion in revenues over the 1997-2002 period. That estimate assumes that the Congress also repeals the alcohol fuels credit, an alternative tax benefit that can be used instead of the partial excise tax exemption. The credit, however, is in almost all cases less valuable than the exemption and is rarely used.

The exemption rate depends on the percentage of alcohol in the fuel and whether the alcohol was made from a fossil fuel (nonrenewable) or nonfossil fuel (renewable) source. The exemption applies only to alcohol fuels produced from nonfossil fuel sources. For example, gasohol, which is 90 percent gasoline and 10 percent (renewable) ethanol--an alcohol fuel produced primarily from corn and sugar--receives a 5.4 cents per gallon exemption from the 18.3 cents per gallon tax on gasoline.

One purpose of the tax benefit--enacted in the late 1970s--was to increase national security by reducing the demand for imported oil and thereby reducing U.S. dependence on foreign oil sources. Another purpose was to provide an additional market for U.S. agricultural products by encouraging domestic production of ethanol. Over the last several years, U.S. environmental action has increased the value of ethanol by mandating the oxygen content of motor fuels in many areas of the country. Use of oxygenated fuels in motor vehicles generally produces less carbon monoxide pollution than does gasoline.

Before the Clean Air Act Amendments of 1990 were enacted, the tax benefits encouraged energy producers to substitute ethanol for gasoline--and successfully so. Motor fuels blended with ethanol made up less than 1 percent of the total motor fuels market in 1980, but that proportion grew to nearly 7 percent by 1990. Since ethanol production uses more resources than gasoline production, the resulting allocation of resources may create economic inefficiencies if the value of those resources in alternative uses is greater than the value of the diminution in air pollution.

The Clean Air Act Amendments reduced the need for the partial excise tax exemption. In that legislation, the Congress mandated the minimum oxygen content of gasoline in areas of the country with unacceptable levels of air pollution.

In the areas where the mandate applies, the partial excise tax exemption for alcohol fuels affects the type of oxygenating agent used but not the total use of oxygenated fuels. The exemption only applies to oxygenated fuels made from renewable resources, effectively meaning ethanol. The other major source of oxygen in gasoline is methyl tertiary butyl ether (MTBE), which does not receive a tax benefit because it is made from natural gas. Given the mandate, ethanol primarily competes with MTBE, not gasoline, in those markets.

The tax benefit encourages the use of higher-cost ethanol rather than lower-cost MTBE. Some proponents of ethanol argue that it is better for the environ-

ment than MTBE. But that argument is not settled. Ethanol appears to reduce carbon monoxide emissions from automobiles more than MTBE does; but ethanol evaporates quickly, especially in hot weather, contributing to ozone pollution. In response, companies have developed ethyl tertiary butyl ether (ETBE), a product derived from ethanol that does not have the same problem of evaporation. It also qualifies for the tax benefit. ETBE, however, does not contribute to reduced carbon monoxide emissions, as does ethanol.

Repealing the excise tax exemption could result in higher federal outlays for price support loans for grains, offsetting a portion of the deficit reduction from the increase in revenues. An increase in outlays--not included in the budget estimates shown above--would probably be much smaller than the estimated revenue increase.

REV-37 IMPOSE A VALUE-ADDED TAX

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Impose a 5 Percent Rate, with a Comprehensive Base	0	92.7	178.8	187.6	196.5	206.1	861.7
Impose a 5 Percent Rate, with Food, Housing, and Medical Care Excluded	0	51.4	99.0	103.5	108.1	113.1	475.1

SOURCE: Joint Committee on Taxation.

NOTE: Estimates are based on an effective date of January 1, 1998. They are net of reduced income and payroll tax revenues, but do not reflect added administrative costs.

A value-added tax (VAT) is a form of general tax used in more than 50 countries, including Canada, Japan, and all other member countries of the Organization for Economic Cooperation and Development (OECD) except Australia and the United States. It is typically administered by taxing the total value of sales of all businesses, but allowing businesses to claim a credit for taxes paid on their purchases of raw materials, intermediate materials, and capital goods from other businesses. As a result, only sales to consumers end up being taxed.

A 5 percent VAT on a broad consumption base (as defined in Table 2-3) would increase net revenues by about $93 billion in 1998 and by about $860 billion through 2002. Most VATs, however, do not tax such a broad base. The typical VAT, for example, excludes education, rental housing, medical care, and hard-to-tax items such as basic financial services. A 5 percent VAT on a narrower base (as defined in Table 2-3) would net only about $51 billion in 1998 and $475 billion through 2002. Those revenue estimates assume that collections would not begin until January 1, 1998, because the Internal Revenue Service would need more than a year to set up a VAT.

A VAT might be preferable to an income tax increase because it would not discourage saving and investment by taxing their return. In addition, a broad-based VAT with a single rate would distort economic decisions less than an equal revenue increase in selective consumption taxes. The VATs that have been enacted in other countries, however, include many tax preferences and multiple rates. Such a tax would distort choices about consumption more than a single-rate, broad-based VAT and could be more distorting than higher income tax rates.

A VAT makes the price consumers pay higher than the price sellers receive. Therefore, adopting one would cause an initial jump in the overall consumer price level because the government computes the consumer price index on a tax-inclusive basis. The increase in the price level, however, would not necessarily lead to further inflation, depending on how the Federal Reserve System responded. Many experts believe that the Federal Reserve would adjust the money supply in a way that would maintain nominal income. Under that scenario, macroeconomic models generally predict little inflation beyond the initial price jump.

The VAT is a regressive tax in the sense that families with lower annual income would pay a larger share of their income in taxes. That effect occurs because the ratio of consumption to annual income is higher for low-income families than for high-income families. A VAT is less regressive over a person's lifetime than in a single year because income and consumption nearly match over a lifetime, even though income tends to fluctuate annually more than consumption does. Many economists believe

that lifetime measures of tax burdens are more meaningful than annual measures.

Table 2-3.
The Size of Two Possible Tax Bases for a Value-Added Tax, 1994

Items Included in Tax Base	Amount (Billions of dollars)
Broad Tax Base	
Total Personal Consumption in Gross Domestic Product	4,699
Net Purchases of Residential Structures	288
Subtotal	4,987
Exclusions from the Base[a]	
Rental value of housing	-681
Religious and welfare activities	-131
Subtotal	-812
Total	4,175
Narrower Tax Base	
Total Personal Consumption in Gross Domestic Product	4,699
Exclusions from the Base[a]	
Rental value of housing	-681
Religious and welfare activities	-131
All medical care (including insurance)	-834
Food consumed at home	-396
Food furnished to employees	-8
Food produced for farm consumption	-1
Brokerage, banking, and life insurance services	-284
Local transit (excluding taxis)	-6
Clubs and fraternal organizations	-12
Tolls for roads and bridges	-3
Private education and research	-105
Subtotal	-2,461
Total	2,238

SOURCE: Congressional Budget Office based on the national income and product accounts.

a. The excluded amount assumes that the specified consumption is taxed at a zero rate.

A VAT could be made slightly less regressive by granting tax preferences for the goods and services low-income people generally consume. Those preferences, however, would substantially increase the costs of enforcement and compliance, and they would reduce revenues. Another way to lessen the VAT's regressivity would be to allow additional exemptions or refundable credits for low-income people under the federal income tax. But exemptions for low-income people would also reduce the revenue gain and would cause many people to file tax returns who otherwise would have no need to file.

Like any new tax, a VAT would impose additional administrative costs on the federal government and additional compliance costs on businesses. If the United States adopted a VAT that was similar to the ones used in the OECD countries, those costs could be substantial. They would be lower if the VAT exempted more small businesses from collecting the tax and if it taxed as many goods and services as possible at the same rate.

A retail sales tax is another way to tax consumption. Because a sales tax is collected entirely at the retail level, however, the incentive to evade a sales tax would be much greater than the incentive to evade a VAT. Moreover, because the sales tax lacks an effective credit mechanism for the taxes that businesses pay on their purchases, it taxes some business purchases by mistake. No OECD country uses a retail sales tax at the national level instead of a VAT.

Other ways to tax a broad consumption base are possible, even though no country has ever tried one. A tax on consumed income, such as the Unlimited Saving Account approach suggested by Senators Domenici and Nunn (S. 722), would tax income but with an exclusion for net savings. Under a tax on consumed income, taxpayers could deduct all contributions to qualified savings accounts but would pay tax on net withdrawals. Because individuals would pay tax on a measure of their total consumption, the tax could include a graduated rate schedule, like the rate schedule of the individual income tax. That schedule would make the consumed-income tax less regressive than a VAT.

REV-38 IMPOSE A BROAD-BASED ENERGY TAX

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Impose a Tax on the Carbon Content of Fossil Fuels ($20.50 per ton)	14.4	21.7	22.0	22.2	22.5	22.7	125.5
Impose a Tax on the Heat Content of Fuels (35 cents per million Btus)	14.6	21.9	22.1	22.3	22.5	22.7	126.1
Impose an Ad Valorem Tax on Energy Consumption (5.25 percent of value)	14.0	21.4	21.9	22.4	22.6	23.1	125.4

SOURCE: Joint Committee on Taxation.

NOTE: Estimates are net of reduced income and payroll tax revenues.

Broad-based energy taxes fall into three types: a carbon tax, a Btu tax, and an ad valorem tax. A tax on the carbon content of fossil fuels (coal, oil, and natural gas) would help to reduce global warming by reducing carbon emissions. The tax, however, would be relatively harsh on coal-producing regions and regions that generate more electricity from coal than from other fuels. A tax on the heat content of fuels (measured in British thermal units, or Btus) that raised the same revenue would be more regionally neutral but would be less effective in reducing carbon emissions. An ad valorem tax on energy raising the same revenue would increase energy prices in a nondistortionary way, but would also be less effective in reducing carbon emissions than a carbon tax. None of those options would significantly reduce U.S. dependence on foreign oil.

Broad-based energy taxes also would have adverse distributional effects because families with lower annual income spend a larger share of their income on energy than families with higher income. The distributional effects of energy taxes are not generally very different, however, from those of a general consumption tax, such as a value-added tax (see REV-37), which would not further environmental goals.

All three options would cause a one-time increase in the U.S. general price level of about 0.4 percentage points and an offsetting one-time decline in the dollar's foreign exchange value. The prices of energy-intensive goods would increase more than the general price increase, and the prices of goods that are not energy intensive would increase less. As a result, the prices of goods produced in the United States that are energy intensive--such as aluminum and chemicals--would rise when valued in foreign currency terms, making those U.S. products less competitive in world markets. Similarly, the prices of goods produced in the United States that are not energy intensive would fall when valued in foreign currency terms, making them more competitive in world markets.

To alleviate the adverse effects on the domestic energy and energy-intensive industries, the United States could institute border adjustments on a limited or extensive basis. A limited border adjustment might levy the energy tax on imported energy and rebate the tax on exported energy. All three options make that adjustment. The adjustment eases the impact on the domestic energy industry, but not the impact on domestic producers of energy-intensive goods. More extensive border adjustments on the

energy content of all goods would also mitigate the adverse effects on energy-intensive industries. However, they would be complicated and costly to administer and might violate the General Agreement on Tariffs and Trade. Therefore, they are not included in these options.

Impose a Tax on the Carbon Content of Fossil Fuels. A tax of $20.50 per ton of carbon content (in 1997 dollars) of coal, oil, and natural gas, if it was indexed for inflation, would raise about $125 billion from 1997 through 2002. The relative carbon content of the three fossil fuels would dictate the specific tax rate for each fuel. That tax rate, based on average carbon content, is equivalent to a tax of approximately $12.40 per ton of coal, $2.70 per barrel of oil, and $0.33 per thousand cubic feet of natural gas (in 1997 dollars).

Imposing a carbon-based tax at the minemouth, wellhead, or dockside for imports could discourage the use of fossil fuels and also encourage switching from higher carbon-emitting fuels to lower ones, thereby reducing subsequent emissions of carbon dioxide (CO_2). The Congress could impose higher tax rates on fossil fuels than assumed in this option. It could, for example, impose taxes either at levels that would discourage future increases in CO_2 emissions or at levels that would reduce emissions from current amounts by some target date.

Recent scientific evidence on the potential for global warming through an intensified greenhouse effect has prompted international concern about the emissions of greenhouse gases such as CO_2. The United States, along with some 150 nations, signed a climate treaty at the June 1992 "Earth Summit" conference in Brazil. Limiting emissions of greenhouse gases by developed countries in 2000 to 1990 levels was one key objective. In 1993, the Administration announced its Climate Change Action Plan for reducing greenhouse gases through a set of 40 voluntary actions by the private sector.

U.S. action, however, would not significantly reduce global CO_2 concentrations in the atmosphere if other countries did not make similar efforts. In addition, since scientists do not fully understand how emissions of greenhouse gases affect atmospheric concentrations, even reducing CO_2 emissions significantly may not prevent global warming. Moreover, a tax that significantly reduced emissions could impose economic costs that exceeded the benefits of such a policy. Adjusting to lower energy use would be costly, especially in energy extracting and processing industries and in energy-intensive manufacturing sectors. Furthermore, other means of controlling greenhouse gases could be adopted. Also, the cost of carrying out emission-control strategies in the future may be much lower as a result of improvements in technology. Thus, waiting to restrict emissions may be more efficient.

Compared with the other broad-based energy tax options, the carbon tax would impose greater costs on colder regions of the country, like the Northeast and Midwest, and on regions that produce electricity primarily from coal. Coal-producing regions might also be hurt relatively more as utilities switched from coal to other energy sources to produce electricity.

Impose a Tax on the Energy Content of All Fuel Sources. A tax of 35 cents per million Btus (in 1997 dollars) imposed on all energy sources and indexed for inflation would also raise about $125 billion from 1997 through 2002. The relative heat content of coal, oil, and natural gas would dictate the specific tax rate for each fuel. That tax rate, based on average heat content, is equivalent to a tax of approximately $7.50 per ton of coal, $1.95 per barrel of oil, and $0.36 per thousand cubic feet of natural gas (in 1997 dollars).

Under this option, the change in relative prices between fossil fuels is similar to the change in relative prices under the carbon tax option because the carbon content of fuel is closely related to the heat content of fossil fuels. On average, the tax rates in this option are lower than those under the carbon tax option because the tax base is broader, including nuclear, hydropower, and other renewable resources. Nonetheless, the tax rate on natural gas is higher than under a carbon tax because the heat content is higher relative to the carbon content for natural gas than for coal and petroleum. Because the average price increases for fossil fuels would be smaller under a Btu tax than under a carbon tax, the reduction in CO_2 emissions would not be quite as large as under the option for a carbon tax.

The tax would be easiest to administer if the Internal Revenue Service (IRS) collected it at the points where fossil fuels enter the economy--minemouth, wellhead, or dockside for imports--because that would minimize the number of taxpayers. The tax would need to be imposed on fuel used in the fuel production and distribution industries to capture all of the energy consumed. If the tax was not imposed on alternative fuels--including hydroelectricity, nuclear, geothermal, and synthetic fuels--then the regional disparities of the tax would be magnified. For example, the Northwest generates more electricity from hydropower than other regions of the country.

The House of Representatives passed one version of a modified Btu tax in 1993. The Congress did not approve that option, however.

Impose an Ad Valorem Tax on All Energy. A tax of 5.25 percent levied at the retail level on all forms of energy would also raise about $125 billion over the 1997-2002 period. An ad valorem tax applied at the retail level would leave the relative prices of different energy sources unchanged and therefore would not encourage consumers to switch from one form of energy to another. As a result, it would not decrease CO_2 emissions as much as a carbon tax for the same revenue increase. In addition, enforcement would be relatively costly with such a tax because the IRS would collect it from a large number of retailers. If the IRS collected the tax at an earlier stage of the distribution process, tax enforcement would be less costly, but the tax would then affect relative energy prices because different fuels have different markups at the retail level.

REV-39 INCREASE EXCISE TAXES ON TOBACCO AND ALCOHOLIC BEVERAGES

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Increase the Cigarette Tax to 48 Cents per Pack	3.4	3.9	3.9	3.8	3.7	3.6	22.3
Increase the Cigarette Tax to 99 Cents per Pack	9.6	10.3	10.1	9.9	9.6	9.3	58.8
Increase All Alcoholic Beverage Taxes to $16 per Proof Gallon	3.7	4.5	4.5	4.6	4.6	4.6	26.5
Index Cigarette and Alcohol Tax Rates for Inflation	0.3	0.6	1.0	1.3	1.7	2.1	7.0

SOURCE: Joint Committee on Taxation.

NOTE: Estimates are net of reduced income and payroll tax revenues.

Federal alcohol and tobacco taxes raised about $13 billion in 1995, including $7 billion from taxes on distilled spirits, beer, and wine and $6 billion from taxes on tobacco. Together they represented nearly one-quarter of revenues from all excise taxes and about 1 percent of total federal revenues.

Smoking and drinking can create costs to society that the prices of tobacco and alcoholic beverages do not reflect. Examples of those "external costs" include higher health insurance costs to cover the medical expenses linked to smoking and drinking, the effects of cigarette smoke on the health of nonsmokers, and the loss of lives and property in alcohol-related accidents.

By raising the price of tobacco and alcoholic beverages, excise taxes can result in consumers' paying the full cost for smoking and drinking. If excise taxes lead to reduced consumption of tobacco and alcoholic beverages, then increasing them would decrease the total external costs that smoking and drinking produce. If those external costs primarily come from heavy or abusive consumption, however, higher taxes on tobacco and alcoholic beverages could unduly penalize moderate and infrequent smokers and drinkers. Furthermore, some research suggests that, at least for tobacco, current taxes may more than adequately compensate for the external costs that smokers impose on society.

Increasing excise taxes to reduce consumption may be desirable regardless of the effect on external costs if consumers are either unaware of or underestimate the harm that their smoking and drinking does to them. If most consumers of cigarettes overestimate rather than underestimate the risks involved with smoking, as some studies have shown, then additional taxes would not be warranted. Teenagers, however, may not be prepared to evaluate the long-term effects of smoking and drinking. Evidence suggests that teenage smoking and drinking declines in response to higher prices for tobacco and alcoholic beverages. A number of national medical organizations have supported a substantial increase in the existing federal excise tax on tobacco in the interests of reducing teenage smoking.

Taxes on tobacco and alcoholic beverages are regressive when compared with annual family in

come; that is, such taxes are a greater percentage of income for low-income families than for middle- and upper-income families.

Increase the Cigarette Tax. The current federal excise tax on cigarettes is 24 cents per pack. Raising it to 48 cents a pack would increase net revenue by about $22 billion between 1997 and 2002. Raising it to 99 cents a pack, as included in President Clinton's 1993 Health Security Act, would increase net revenues by about $59 billion between 1997 and 2002.

Increase Taxes on Alcoholic Beverages. Current federal excise taxes on beer and wine remain much lower than the federal excise tax on distilled spirits in terms of the tax per ounce of ethyl alcohol. The current tax on distilled spirits of $13.50 per proof gallon results in a tax of about 21 cents per ounce of alcohol. The current tax on beer of $18 per barrel results in a tax of about 10 cents per ounce of alcohol (assuming an alcoholic content for beer of 4.5 percent), and the current tax on table wine of $1.07 per gallon results in a tax of about 8 cents per ounce of alcohol (assuming an average alcoholic content of 11 percent).

Increasing the federal excise tax to $16 per proof gallon for all alcoholic beverages would raise about $27 billion between 1997 and 2002. A tax of $16 per proof gallon would result in a tax of about 25 cents per ounce of ethyl alcohol. It would raise the tax on a 750-milliliter bottle of distilled spirits from about $2.14 to $2.54, the tax on a six-pack of beer from about 33 cents to 81 cents, and the tax on a 750-milliliter bottle of table wine from about 21 cents to 70 cents.

Index Cigarette and Alcohol Tax Rates for Inflation. Indexing cigarette and alcoholic beverage tax rates annually for inflation during the preceding year would raise $7 billion between 1997 and 2002. Indexing those taxes would prevent inflation from eroding real tax rates and would avoid the need for abrupt increases in the future.

An alternative to indexing would be to convert current unit taxes on quantities of those goods to ad valorem taxes, which equal a percentage of the manufacturer's price. That method would link tax revenues to price increases, although it would tie revenues to the price of taxed goods, not the general price level. A shortcoming of the ad valorem tax is that it might create incentives for manufacturers to lower sales prices artificially to company-controlled wholesalers in order to avoid part of the tax.

REV-40 INCREASE TAXES ON PETROLEUM AND MOTOR FUELS

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Impose a Tax on Domestic and Imported Oil ($5 per barrel)	6.0	19.3	19.3	19.6	19.8	19.8	103.8
Impose an Oil Import Fee ($5 per barrel)	3.4	11.0	11.4	11.8	12.2	12.7	62.5
Increase Motor Fuel Taxes by 12 Cents per Gallon	9.6	12.6	12.4	12.3	12.5	12.8	72.2

SOURCE: Joint Committee on Taxation.

NOTE: Estimates are net of reduced income and payroll tax revenues.

Increasing petroleum taxes could raise significant amounts of revenue, encourage conservation by making petroleum more expensive, reduce pollution, and decrease the country's dependence on foreign oil suppliers. The United States depends on foreign sources for about half of its oil and about one-fifth of its total energy. Experience illustrates that this dependence on foreign sources exposes the U.S. economy to potential interruptions in petroleum supplies and to volatile petroleum prices.

Imposing new or higher petroleum taxes would raise petroleum prices and reduce consumption, thus helping to promote conservation. To the extent that taxes on oil reduced the demand for imported oil, foreign suppliers would absorb part of the tax through lower world oil prices. To the extent that petroleum taxes reduced petroleum consumption, the taxes would also reduce carbon dioxide emissions and could, therefore, contribute to efforts to reduce global warming.

Petroleum taxes would have different effects on taxpayers in different parts of the country and with different incomes. Taxes that increased the relative price of fuel oil would have the greatest impact on consumers in the Northeast, and taxes that increased the relative price of gasoline would have the greatest impact on consumers in the West. In addition, taxes on gasoline and other petroleum products absorb a greater percentage of income for low-income families than for middle- and upper-income families.

Taxing petroleum is not the only way of reducing dependence on foreign oil supplies. Stockpiling oil would arguably be a better way of coping with the risks of increased dependence on imports because it would not artificially reduce current energy use by households and businesses. That argument is based on the premise that, aside from the problem of interruptions in supply, world oil prices accurately reflect real resource costs and thus already provide an appropriate incentive to conserve.

Impose an Excise Tax on Domestic and Imported Oil. An excise tax of $5 per barrel on all crude oil and refined petroleum products--both domestically produced and imported--would raise revenues by about $104 billion from 1997 through 2002. It could increase the price of a gallon of gasoline or fuel oil by as much as 12 cents.

A tax on oil would increase the price that consumers must pay, giving them an incentive to use less oil either through conservation efforts or by switching to an alternative source of energy such as natural gas or coal. The tax would cause oil reserves to decline in value and coal and gas reserves to increase in

value. Those shifts in value would discourage exploring for and producing oil and would encourage producing coal and natural gas.

An oil tax, whether on all oil or only imported oil, would raise the relative costs for industries that use oil as their primary production input (for example, the petrochemical and paint industries). Consequently, domestic companies in those industries would find it more difficult to compete with foreign companies that would pay less for oil. To ameliorate that loss in competitiveness, imposing the same tax rate on the oil content of competing imports would be necessary. Such a tax would be cumbersome to design and administer and may violate the General Agreement on Tariffs and Trade.

Impose an Oil Import Fee. As an alternative to an excise tax on all oil, the Congress could impose the tax only on imported crude oil and refined petroleum products. An oil import fee of $5 per barrel would raise revenues by about $63 billion from 1997 through 2002.

An oil import fee would allow domestic suppliers to charge a higher price and still remain competitive with imports, providing an incentive to increase domestic crude oil production and a windfall to some domestic oil producers. Like the tax on all oil, the fee would also maintain incentives for conservation by increasing energy prices.

An oil import fee would reduce U.S. dependence on foreign oil in the short term, although in the long term it might increase dependence by depleting U.S. oil supplies faster. Domestic and foreign oil are relatively close substitutes, and therefore, the difference in the prices consumers would pay for them would be slight. But foreign producers would receive a lower net price than domestic producers because of the fee. A large portion of that difference between the net price that domestic and foreign producers would receive represents a transfer of income from domestic consumers to domestic producers. Consequently, the federal government would receive only about half of the increase in consumers' expenditures for oil under an import fee because the United States imports nearly half of the oil it consumes and demand is insensitive to price in the short run.

Because an oil import fee would reduce U.S. demand for imported oil, important U.S. trading partners might object to it. Under the terms of the United States-Canada Free Trade Agreement, Canadian oil imports would be exempt from an import fee. However, a similar exemption does not apply to Mexican oil under the North American Free Trade Agreement. Because imports from Canada now account for about 15 percent of U.S. oil imports, the Canadian exemption would reduce the fee's revenue potential substantially. Legislation imposing a fee would require special rules to prevent other countries from avoiding the tax by shipping oil through Canada.

Increase Motor Fuel Excise Taxes. Federal motor fuel taxes were increased by 4.3 cents per gallon in the Omnibus Budget Reconciliation Act of 1993. They are currently 18.3 cents per gallon of gasoline and 24.3 cents per gallon of diesel fuel. Revenue from the 4.3 cents per gallon tax increase goes into the general fund. The remaining revenue goes into the Highway Trust Fund and several related trust funds. State governments also impose gasoline and diesel taxes, ranging from 7.5 cents to 29 cents per gallon.

As of this writing, the Congress is considering a repeal of the tax of 4.3 cents per gallon that goes into the general fund. Nonetheless, many analysts consider the overall tax to be too low. In comparison with motor fuel tax rates in other countries, many of which are well over $1 a gallon, U.S. tax rates are still among the lowest in the world. In addition, even with the recent spike in gasoline prices in the spring of 1996, the average national price of all grades of gasoline is still 10 cents to 15 cents per gallon cheaper than it was in March 1981, when it reached a peak of about $1.40 per gallon. In real terms, that represents a decline of over 40 percent. If the price of gasoline had remained constant at the real level it reached in 1981, the price would now be around $2.30 per gallon. Therefore, an additional tax of 12 cents or even 50 cents per gallon would not put the total cost of gasoline above what consumers have already experienced in real terms.

A tax increase would reduce consumption of gasoline and diesel fuel by encouraging people to drive less or purchase more fuel-efficient cars and trucks.

In addition, the tax would offset, though imperfectly, the costs of pollution and road congestion that automobile use produces. A rate increase on motor fuel taxes would not adversely affect U.S. producers relative to foreign producers because final consumers and the domestic transportation industry purchase most of the motor fuel.

Increasing tax rates on motor fuels would impose an added burden on the trucking industry and on people who commute long distances by car, who are not necessarily the highway users who impose the highest costs of pollution and congestion on others. Pollution and congestion costs are much higher in densely populated areas, primarily in the Northeast and coastal California, whereas per capita consumption of motor fuel is highest in rural areas.

A 12 cent increase would raise revenue by about $12.5 billion per year. It would raise the total federal tax to 30.3 cents per gallon.

Some people have proposed even larger tax increases, such as 50 cents per gallon. An increase that large would produce significant adjustment costs for people and businesses who have based decisions about where they live and work and their choice of vehicle on low gasoline prices. Phasing in the tax increase, however, would reduce those costs by allowing businesses and consumers more time to adjust. Five successive annual 10 cent increases would raise about $50 billion per year after being fully phased in and $189 billion from 1997 through 2002.

To reduce the deficit, the Congress could allocate the increased revenues to the general fund, as it did with a portion of the added revenues from the rate increases in 1990 and 1993, rather than using the additional revenues to finance further highway spending.

REV-41 IMPOSE EXCISE TAXES ON WATER POLLUTANTS

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Impose a Tax on Biological Oxygen Demand	1.2	1.7	1.6	1.5	1.5	1.4	8.9
Impose a Tax on Toxic Water Pollutants	0.3	0.5	0.5	0.4	0.4	0.4	2.5

SOURCE: Joint Committee on Taxation.

NOTE: Estimates are net of reduced income and payroll tax revenues.

Major facilities that discharge pollutants directly into water or indirectly into sewer systems are currently subject to regulations that specify pollution abatement technology or impose concentration limits on their discharges. Taxes on water pollutants discharged by those facilities could provide a significant source of revenue and could encourage further reductions in pollution below the level that current regulations require. Generally, firms subject to water pollution standards do not pay taxes or fees on effluents (discharges) that regulations still allow.

There are two major types of water pollutants: biological oxygen demand (BOD) and toxics. BOD measures the effect of pollutants that encourage algae growth, which in turn depletes oxygen necessary to sustain aquatic life. (One BOD equals one milligram of oxygen consumed per 2.2 pounds of effluent.) One option is to impose a tax on BOD discharges. A second option is to impose a tax of varying rates on certain toxic discharges.

Taxes can reduce pollution in a cost-effective manner because they encourage firms with the lowest abatement costs to reduce pollution, while allowing firms with high abatement costs to continue polluting and pay the tax. Reductions in discharges caused by the tax would increase welfare if the additional abatement costs were less than or equal to the social benefits from reduced pollution levels. However, accurate estimates of additional social benefits from reducing pollution levels do not exist in many cases. In addition, imposing a tax on one class of pollutants might reduce other pollutants because some wastewater treatment processes reduce several pollutants simultaneously. However, the tax option might raise constitutional issues concerning federal taxation of local governments, requiring direct taxation of primary sources that discharge to publicly owned treatment works (POTWs) rather than taxing the POTWs themselves.

Tax on Biological Oxygen Demand. Most of the high-volume BOD dischargers (sometimes referred to as point sources) are POTWs, paper and pulp mills, food processors, metal producers, and chemical plants. Discharges by point sources total about 10.6 million pounds of effluent per day, and publicly owned treatment works discharge about 9.6 million pounds of that amount.

The cost of controlling discharges at POTWs and many industries subject to the Clean Water Act regulations averages about 50 cents to 75 cents per pound of effluent removed. A charge on BOD discharges could encourage manufacturing facilities and POTWs that face lower abatement costs to reduce pollution. Assuming effluents record an average concentration of 22 BOD, a tax of about 64 cents per pound of effluent discharged would raise $9 billion between 1997 and 2002.

The costs of administering a BOD water pollution excise tax would be small because allowable

levels of BOD discharges are specified in the permits that state and local governments issue to every source of water pollution. Levying a tax on effluents from POTWs, as well as from large industrial dischargers, would ensure that the tax base included all of the largest dischargers of BOD. A recent report on water quality submitted to the Environmental Protection Agency (EPA) by states, tribes, and other jurisdictions ranks municipal sewage treatment plants as the second highest source of impairment to water quality for rivers, lakes, and estuaries (agriculture and urban runoff were ranked as number one). If a tax could not be levied for constitutional reasons directly on POTW discharges, the POTWs themselves could collect the tax directly from polluters that discharge into sewer systems.

Tax on Toxic Water Pollutants. Manufacturers in the United States discharged more than 270 million pounds of toxics into water directly in 1993 and more than 310 million pounds of toxics into water indirectly through sewers. Toxic pollutants generally include organic chemicals (such as solvents and dioxins), metals (such as mercury and lead), and pesticides. Those toxics may pose a threat to the aquatic environment and to human health.

The amount of environmental harm that toxic water pollutants cause depends on their toxicity. The EPA has devised a weighing method to indicate the toxicity of various pollutants. Using that weighing system makes it possible to measure the quantities of different types of toxics by their "toxic pound equivalents" (which the EPA defines as the pounds of the pollutant multiplied by its toxic weight). This option adopts tax rates developed by the Congressional Research Service (CRS) in a study on the discharges of manufacturing firms in 1987. CRS defined five categories of pollutants based on their toxicities. The tax rates varied from 0.65 cents per pound for the least toxic category of pollutants to $63.40 per pound for the most toxic category. Those rates correspond to a charge of $32.35 for the equivalent of each toxic pound. The variable tax rates provide firms with a greater incentive to reduce their most toxic discharges.

According to the EPA, the cost of controlling the equivalent of another toxic pound varies among industries, ranging from $1.50 to $606 (in 1991 dollars). The tax, therefore, could encourage industries and firms with low abatement costs to reduce their toxic discharges and would raise $2.5 billion from 1997 through 2002.

The Internal Revenue Service could use information that the EPA's Toxic Release Inventory (TRI) provides on toxic discharges by manufacturing firms to assess tax payments or the EPA could collect the tax on behalf of the Internal Revenue Service. An important consideration, however, is that the accuracy of TRI data is questionable. The TRI contains self-reported data, and many facilities that meet the reporting requirements fail to file reports or file inaccurate ones. To improve the accuracy of the TRI database and enhance enforcement, frequent auditing would be necessary.

REV-42 IMPOSE EXCISE TAXES ON AIR POLLUTANTS

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Stationary Sources							
Impose a Tax of $400 per Ton on Sulphur Dioxide	3.7	5.2	4.9	4.8	4.6	4.5	27.7
Impose a Tax of $3,000 per Ton on Nitrogen Oxides	17.5	24.9	23.4	22.7	21.9	21.2	131.6
Impose a Tax of $2,000 per Ton on Particulate Matter	3.1	4.3	4.1	4.0	3.8	3.7	23.0
Impose a Tax of $5,000 per Ton on Volatile Organic Compounds	26.3	37.3	35.1	34.0	32.9	31.8	197.4
Mobile Sources							
Impose a One-Time Emission Tax Averaging $250 per Vehicle on New Automobiles and Light Trucks	1.6	2.2	2.1	2.0	1.9	1.9	11.7

SOURCE: Joint Committee on Taxation.

NOTE: Estimates are net of reduced income and payroll tax revenues.

The Clean Air Act requires the Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards designed to protect public health and welfare. The EPA defines acceptable levels for six air pollutants: sulfur dioxide (SO_2), nitrogen oxides (NO_x), ozone (O_3), particulate matter (PM-10), carbon monoxide (CO), and lead (Pb). The pollutants SO_2 and NO_x are considered primarily responsible for acid rain, which the EPA believes degrades surface waters, damages forests and crops, and potentially increases the incidence of respiratory ailments. Large industrial sources, notably coal-fired electric utilities, emit significant quantities of those pollutants. Industrial production and the use of automobiles and trucks emit NO_x and volatile organic compounds (VOCs), which combine with sunlight and other compounds to produce ozone pollution. Electric utilities and motor vehicles emit particulate matter when they burn fossil fuels. Particulate matter can carry heavy metals and cancer-causing organic compounds into the lungs, thus increasing the incidence and severity of respiratory diseases. Carbon monoxide is produced primarily by motor vehicles and residential woodburning, and it can also pose direct health hazards. Exposure to lead may cause neurological disorders and cardiovascular disease. Discharges of lead were significantly reduced with the phaseout of leaded gasoline. In 1994, however, about 62 million people lived in areas that did not meet the EPA's National Ambient Air Quality Standards because of unacceptable levels of at least one of the six principal pollutants.

With some minor exceptions, firms subject to air pollution standards must incur the costs needed to reduce emissions to comply with regulations. Most

firms do not, however, pay taxes or fees on emissions that regulations still allow, although major point sources are expected to pay approximately $400 million annually in user fees to cover program costs of state operation permits under the Clean Air Act Amendments of 1990. The 1990 amendments also adopted a new acid rain control program that introduces a market-based system for emission allowances to reduce SO_2 emissions. An emission allowance is a limited authorization to emit a ton of SO_2. Affected electric utilities are allotted tradable allowances based on their past fuel use and statutory limits on emissions. Once the allowances are allotted, the act requires that annual SO_2 emissions not exceed the number of allowances held by each utility plant. Firms may trade allowances among each other, bank them for future use, or purchase them through periodic auctions held by the EPA. The market for allowances is structured to encourage firms with relatively low costs of abatement to reduce their emissions and sell surplus allowances to firms that have relatively high costs of abatement.

The 1990 Clean Air Act Amendments strengthened components of the earlier law for mobile sources of pollution. The tailpipe standards for cars, buses, and trucks were tightened, and inspection and maintenance programs were expanded to include more regions with pollution problems and allow for more stringent tests. The amendments also introduced several regulations to reduce air pollution from mobile sources. The act mandated that improved gasoline formulations be sold in some polluted cities to reduce levels of carbon monoxide and ozone. It also provided new programs that set low emission standards for vehicles to encourage the introduction of even cleaner cars and fuels. Despite the progress to date in controlling air pollution from motor vehicles, mobile sources continue to have a significant impact on national air quality. On average nationwide, highway motor vehicles contribute one-quarter of all VOC emissions, almost one-third of NO_x emissions, and over 60 percent of CO emissions. A tax related to emissions from mobile sources could provide an additional incentive for consumers to purchase cleaner cars and trucks.

The incremental cost of controlling pollution from stationary sources varies, given the numerous sources. The four options that tax pollution from stationary sources would base the tax rates on an estimate of the average cost of reducing an additional ton of pollution. Consequently, some firms with low abatement costs might reduce pollution below allowable standards. The option that taxes emissions from mobile sources could also reduce pollution levels. (See REV-38 and REV-40 for other taxes that might reduce emissions of air pollutants.) Reductions in emissions as a result of the taxes would increase welfare if the additional abatement costs were less than or equal to the social benefits. However, accurate estimates of additional social benefits from reducing pollution levels do not exist in many cases. The revenue estimates for the options discussed below all assume that some reduction in emissions occurs as a result.

Tax Emissions of SO_2 and NO_x from Stationary Sources. Imposing taxes of $400 per ton of SO_2 emissions and $3,000 per ton of NO_x emissions from all stationary sources would raise roughly $28 billion for SO_2 and $132 billion for NO_x from 1997 through 2002. Basing the tax on the terms granted in air pollution permits, which all polluting firms must acquire, would minimize the costs of administration for the Internal Revenue Service. The present monitoring and reporting system for stationary sources that the EPA and state regulators operate could be used to enforce the tax. If the actual emission levels of polluters were lower than permitted levels, polluters could apply for revised permits based on those actual levels. If the tax was based on permitted emission levels, it would be equivalent to the government's selling pollution permits at their fair market price.

The proposed tax on SO_2 could reduce pollution below the mandated amounts contained in the 1990 amendments. Some electric utilities and manufacturing plants might switch to coals with lower levels of sulfur because that would be less costly than paying the tax, and others might choose to operate their most heavily emitting plants less frequently or to install new SO_2 control devices. The tax system could interact with the tradable allowance system, thereby allowing the government to collect revenues based on emission levels and firms to collect the proceeds from the sale of allowances. (The average sale price of allowances would probably adjust downward in the event of a tax.) The tax on NO_x could also reduce emissions below mandated levels contained in the

1990 amendments if some firms adopt currently available abatement techniques whose capitalized costs are lower than the tax they would otherwise pay.

Tax Emissions of PM-10 from Stationary Sources. A tax of $2,000 per ton of particulate matter would raise about $23 billion from 1997 through 2002. Some electric utilities and manufacturing plants might install improved electrostatic precipitators, wet scrubbers, or other equipment that reduces PM-10 emissions to lower their tax burdens. This tax could be administered in the same manner as the taxes on SO_2 and NO_x.

Tax Emissions of VOCs from Stationary Sources. Stationary sources of volatile organic compounds range from huge industrial facilities such as chemical plants, petroleum refineries, and coke ovens to small sources such as bakeries and dry cleaners. Their vast number and diversity make it difficult to estimate emissions and the costs of abatement. A tax of $5,000 per ton on all VOC emissions from stationary sources might promote some abatement and would generate almost $200 billion in revenues from 1997 through 2002.

The advantage of a broad-based tax on VOCs is that it would capture small sources, which the EPA estimates are responsible for approximately 80 percent of all emissions from stationary sources. Because stationary sources emitting less than 2.5 tons of VOCs per year are not currently subject to federal regulation, a broad-based VOC tax would be administratively harder to carry out than a tax on large sources alone. Assessing the tax on small sources through technology-based estimates of emissions rather than measured emissions would reduce administrative costs but make the incentives less precise.

Tax Emissions of NO_x, VOCs, and CO from Mobile Sources. A one-time tax imposed on new automobiles and light trucks could be based on grams of NO_x, VOCs, and CO emitted per mile as estimated under the EPA certification tests for emissions that are required on every new vehicle. The tax could be administered like the "gas guzzler" excise tax. The EPA would determine the tail-pipe emissions for each new model of light-duty vehicles, and the tax would be based on those emission rates. The auto dealer would collect the tax on behalf of the Internal Revenue Service from the vehicle's purchaser.

Such a tax averaging $250 per new vehicle could raise $11.7 billion in revenues from 1997 through 2002. Vehicles made in earlier years have been excluded from the estimate because of the administrative problems of collecting a tax on older vehicles. A disadvantage of excluding them, however, is that vehicles from earlier years represent more than 90 percent of the light-duty vehicles in use and an even greater share of emissions. In addition, the tax would encourage people to delay purchases of new vehicles by raising their price.

Chapter Three

Defense and International Discretionary Spending

The nation's spending on military and foreign affairs has fallen dramatically since the Cold War era. As a result of cuts in forces and acquisition programs, spending for defense has been reduced by nearly two-fifths from its recent peak in the mid-1980s. Outlays for defense and international affairs programs account for about one-sixth of the total federal budget in 1996 compared with nearly one-half in 1966 and about one-fourth in the 1980s. Nonetheless, those two functions still represent about one-half of all spending subject to annual appropriations.

Defense cuts were a major element of the deficit reduction packages the Congress passed in 1990 and 1993. By contrast, the budget plan the Congress adopted last year kept defense spending relatively constant while eliminating the deficit by 2002. International affairs, however, was not so favored: its budget for 1996 was cut by 10 percent from the 1995 level.

The National Defense Budget

National defense budget authority more than doubled in the early years of the Reagan Administration--from $144 billion in 1980 to $295 billion in 1985--then was held at roughly its 1985 level through 1990 before beginning to decline. But when inflation is taken into account, a different picture emerges. Since 1985, real (inflation-adjusted) defense budget authority has dropped sharply, for a cumulative decline of 35 percent (see Figure 3-1).

That decrease was made possible by reductions in the number of military and civilian personnel, the closing of bases, and the cancellation or deferral of many acquisition programs. But savings from eliminating forces have yet to be matched by proportionate decreases in operating costs for the Department of Defense's (DoD's) extensive infrastructure of bases, supply and repair depots, and other facilities.

Some of the options in this chapter would reduce military forces or capabilities in specific areas; others would trim spending for support activities. Although this volume focuses on ways to reduce the federal deficit, the savings from those options could be applied in any number of ways. For example, the savings could fund additional spending for higher-priority military functions without increasing overall budgetary allocations for defense.

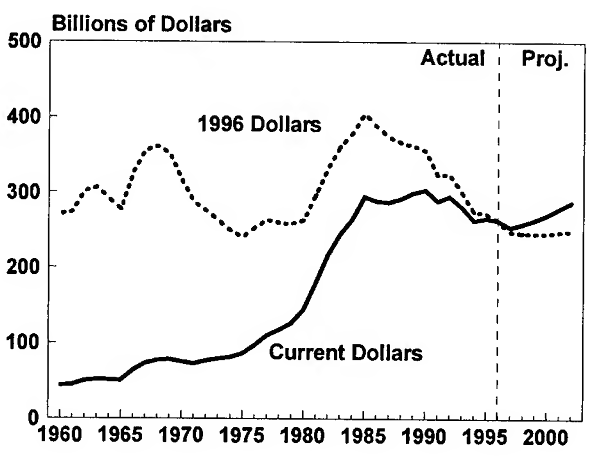
Size and Structure of U.S. Military Forces

One aim of U.S. national security policy is to maintain military forces that are powerful enough to deter potential adversaries from attacking the United States directly or to defeat them, should deterrence fail. The collapse of the Soviet Union and the Warsaw Pact removed the single greatest military threat to the United States and its allies in Europe and the Pacific.

On entering office, the current Administration initiated a broad review--termed the Bottom-Up Review--of the national security situation and U.S. military strategy and forces. That review established goals for major elements of U.S. forces based on the scenario of fighting two major regional conflicts nearly simultaneously. Those goals are 30 percent to 40 percent below force levels of the Cold War era. Reductions of that magnitude have been controversial. Some Members of Congress and certain retired military leaders have argued for keeping more forces than the Administration plans, either because they reject the Administration's postulated two-conflict scenario or because they believe greater numbers of forces would be needed to actually meet that threat.

Other military analysts and policymakers, however, believe that the two-conflict strategy overstates the likely magnitude of security risks the United States will face in coming years. They argue that further reductions in military forces are possible with little risk to national security and that the technical capabilities of current U.S. forces are overwhelmingly superior to those of any likely adversary. Furthermore, in most conceivable situations, U.S. allies would join the military campaign. To accommodate those views, additional reductions in military forces are among the options presented in this chapter.

Figure 3-1.
Budget Authority for National Defense
(By fiscal year)



SOURCE: Congressional Budget Office based on data from the Office of Management and Budget and the Department of Defense.

Strategic Forces

Strategic forces are much reduced from Cold War levels. Since 1990, the United States has nearly halved its force of land-based intercontinental ballistic missiles, reduced the number of bombers committed to strategic missions and taken them off alert status, and reduced the number of submarine-based missiles from 584 to 360 (see Table 3-1). Most strategic analysts believe that those forces still provide a robust deterrent to a direct nuclear attack. All parties have now ratified the first Strategic Arms Reduction Treaty (START I). In 1995, the Congress ratified START II, which would commit the United States and Russia to make even larger reductions in strategic forces. But Russia's parliament has yet to do likewise. Option DEF-01 examines the savings that would result from accelerating planned cuts in U.S. strategic forces, and DEF-02 looks at an early cancellation of D5 missile purchases.

Conventional Forces

In its Bottom-Up Review, the Administration determined the conventional forces it believes the United States would have to deploy to win two nearly simultaneous conflicts. Those forces include 10 active Army divisions supplemented by 15 Army National Guard brigades and other reserve combat and support units. The eight National Guard divisions that represent the largest component of reserve combat units were not allocated a role in meeting the two-conflict threat; instead, they were defined as the nation's strategic reserve. The Navy will retain 11 active carriers plus one reserve carrier for training and local contingencies. And the Air Force will keep 13 active tactical fighter wings, with another seven in the reserve forces. By September 1997, most conventional military forces will have been cut to their target levels (see Table 3-1). Several options would further reduce forces. DEF-17 would eliminate two of the 10 active divisions, and DEF-18 would cut four of the eight National Guard divisions. DEF-06 would

Table 3-1.
U.S. Military Forces (By fiscal year)

	1990	1993	1995	1997	Bottom-Up Review Plan[a]
		Strategic Forces			
Land-Based ICBMs	1,000	787	550	500	500
Strategic Bombers	244	168	107	126	154
Submarine-Launched Ballistic Missiles	584	408	360	432	336
		Conventional Forces			
Land Forces					
Army divisions					
Active	18	14	12	10	10
Reserve[b]	10	8	8	8	5 or more
Marine Corps divisions[c]	4	4	4	4	4
Naval Forces					
Battle force ships	546	435	373	357	346
Aircraft carriers					
Active	15	13	11	11	11
Reserve	1	0	1	1	1
Navy carrier air wings					
Active	13	11	10	10	10
Reserve	2	2	1	1	1
Air Forces					
Tactical fighter wings					
Active	24	16	13	13	13
Reserve	12	11	7	7	7
Airlift aircraft					
Intertheater	400	382	374	345	d
Intratheater	460	380	428	430	e

SOURCE: Congressional Budget Office using data from Office of the Secretary of Defense, *Annual Report to the President and the Congress* (March 1996).

NOTE: ICBMs = intercontinental ballistic missiles.

a. The Bottom-Up Review did not provide goals for all types of forces. Estimates of strategic forces are based on the Nuclear Posture Review, which was completed after the Bottom-Up Review.

b. Excludes 15 enhanced-readiness brigades.

c. Includes one reserve Marine Corps division.

d. The goal for intertheater airlift is expressed as 49 million to 52 million ton-miles a day of transport capability rather than in terms of number of aircraft.

e. No goal has yet been set for intratheater airlift capability.

reduce the number of carriers by two and the number of carrier air wings by one. DEF-10 would reduce Air Force tactical air wings to a total of 18, a reduction of two from the force level in the Bottom-Up Review.

The Bottom-Up Review also described a need to improve some areas. To deploy forces to two theaters, the Secretary of Defense called for enhancing the strategic mobility forces by adding more Air Force airlift aircraft, more Navy and Ready Reserve Force cargo ships, and by prepositioning matériel abroad and at sea. Those efforts are also the subject of options in this chapter. DEF-12 identifies an alternative to the Administration's plan to purchase the C-17 airlifter; DEF-13 and DEF-21 would slow DoD's efforts to modernize tactical airlift forces and add to stocks of prepositioned matériel.

Modernization

Spending for weapon systems in recent budgets is down more than 50 percent from Cold War levels. The deep cuts DoD made in its forces have enabled it to sharply reduce purchases of ships, planes, and fighting vehicles without creating a shortage of equipment. But beginning around the end of this decade, DoD will need to resume purchasing many of those items, make further cuts in forces, or face a rapidly aging stock of equipment. The Congressional Budget Office estimates that in the 2001-2010 period, spending for procurement programs currently planned by the military services will average as much as two-thirds more than the 1995 level of procurement funding. Several of the options presented in this chapter would either defer or cancel some of the programs responsible for that projected increase. DEF-07, for instance, would slow the Navy's purchases of destroyers. DEF-11 and DEF-20 would cancel the Air Force's F-22 fighter acquisition program and the Army's Comanche helicopter program, respectively.

Although procurement has fallen sharply, DoD acquisition managers have followed a deliberate policy of maintaining a relatively high level of research and development (R&D) spending. That policy was seen as key to keeping the United States at the technological forefront for future weapons while production of earlier generations of weapons was coming to a close. But the Administration's budget projections for the rest of the decade suggest that R&D spending will decline considerably through 2000 as several expensive systems currently in development move to the procurement phase. That shift, together with a boost to procurement spending in future budgets, will return R&D spending to close to its historical level of about one-fourth of procurement spending. A few of the options would slow the development programs for new weapons. One (DEF-22) would reduce spending for dual-use technology programs.

Roles and Missions

The Commission on Roles and Missions of the Armed Forces was established by the Congress to review all aspects of the organization of the Department of Defense for possible efficiencies and improvements. It looked at such matters as the duplication of military missions among the services and the possible consolidation or privatization of support activities such as training, maintenance, and intelligence gathering. Some of the options described in this chapter are drawn from previous CBO analyses of the issues related to the services' roles and missions. DEF-15, for instance, would make the Army responsible for close air support, eliminating an Air Force mission. DEF-42 and DEF-44 would privatize support activities now staffed with DoD civilian employees.

Pay and Benefits of Military Personnel

Options DEF-23 through DEF-30 present ways to reduce spending for military personnel. Some of those options would reduce elements of military compensation, including the housing allowance (DEF-24), the subsistence allowance (DEF-25), and special bonus pay for critical occupations (DEF-27 and DEF-28). Others would lower the number of military personnel needed to staff the forces and activities of the military (DEF-23 and DEF-26).

Military health care is a $15 billion item in the defense budget. Much of that spending is for the care of the dependents of active-duty personnel as well as

retirees and their families. Four options (DEF-31 through DEF-34) present different approaches to reducing spending for military health care.

Operation and Maintenance

Operations consume the largest share of the defense budget and may offer the greatest opportunities to achieve efficiencies without cutting military capability (see Table 3-2). CBO's options stress ways to consolidate activities among the military services or to turn activities over to the private sector. The areas affected by the options include professional military education (DEF-36), flight training (DEF-38), military housing (DEF-39), management of acquisition programs (DEF-41), and clubs and recreation facilities (DEF-43). Those options have little direct connection to the readiness of military forces: instead, they are oriented toward achieving efficiencies in the infrastructure that supports the forces.

Table 3-2.
Appropriations for National Defense for Fiscal Year 1996 (In billions of dollars)

	Budget Authority	Outlays
Department of Defense		
Military personnel	69.3	67.2
Operation and maintenance	93.2	89.8
Procurement	43.1	48.3
Research, development, test, and evaluation	35.4	34.5
Military construction	6.9	6.5
Family housing	4.3	4.0
Other	0.8	1.7
Subtotal	252.9	252.0
DOE's Atomic Energy Program	10.7	10.5
Other National Defense	0.9	1.1
Total	264.4	263.6

SOURCE: Congressional Budget Office.

NOTE: DOE = Department of Energy.

How to Use and Combine Savings Estimates

The table at the beginning of each option displays the savings it would generate through 2002. To define savings, it is necessary to have a starting point. Savings for most defense programs have been computed relative to spending detailed in the Administration's plan for 1996 through 2002 (the 1996 plan), after adjusting for Congressional action on the fiscal year 1996 budget. Assume, for example, that the Administration's plan was to buy 18 destroyers over the 1997-2002 period and the CBO alternative would buy 12 instead. The base-case funds are those that CBO estimates are needed to acquire the 18 ships at an average rate of three a year. Annual savings for the option represent the difference between CBO's estimates of the annual cost for three ships and two ships. If the Congress, in authorizing and appropriating funds for 1996, had directed DoD to buy fewer or more destroyers in future years, CBO would have adjusted its base case accordingly before computing savings.

Readers may wish to combine several options into a package of deficit reduction measures. The package selected should not include options that are mutually exclusive or that may overlap, resulting in the double-counting of savings. Subject to that caution, the resulting effects on future deficits may be estimated as follows.

First, select a baseline from which to start. CBO has projected the baseline deficit under two assumptions about overall discretionary spending: one adjusts spending for inflation, subject to the caps on overall discretionary spending, which were revised and extended through 1998 by the Omnibus Budget Reconciliation Act of 1993; the other assumes that discretionary spending is frozen at the 1996 level through 2002. Both are based on economic assumptions consistent with a balanced budget by 2002.[1] Those projections appear in Table 1-4 in Chapter 1.

1. Chapter 1 also discusses alternative sets of deficit projections that incorporate current-policy economic assumptions. Those alternative assumptions would not affect projections of discretionary spending. They would, however, affect the size of future deficits and therefore the total amount of deficit reduction needed to achieve a balanced budget.

Second, decide whether to include the savings (or costs) in the Administration's 1996 defense plan. Measured against the inflation-adjusted baseline, the 1996 plan generates six-year total savings of $147.5 billion in outlays (see Table 3-3, which shows the year-by-year savings). Readers starting from the baseline adjusted for inflation can subtract the annual savings reflected in the President's 1996 plan from the deficits shown in Table 1-4. (By doing so, readers implicitly accept all of the Administration's pol-

Table 3-3.
Alternative Budget Paths for National Defense (By fiscal year, in billions of dollars)

	1996	1997	1998	1999	2000	2001	2002
Budget Resolution for 1997							
Budget Authority	264.4	265.6	268.2	271.0	273.3	276.0	278.8
Outlays	263.6	264.1	263.0	266.3	270.0	269.0	269.0
CBO's Projections for National Defense							
1996 Funding Level Adjusted for Inflation							
Budget authority	264.4	273.2	281.8	290.5	299.4	308.5	318.0
Outlays	263.6	271.0	276.8	285.5	296.2	298.7	310.3
1996 Funding Level							
Budget authority	264.4	264.5	264.5	264.6	264.6	264.7	264.8
Outlays	263.6	265.2	263.6	264.1	265.9	260.6	262.5
Administration's 1996 Plan							
Budget Authority	257.8	253.4	259.6	266.3	276.0	286.5	286.3[a]
Outlays	261.4	257.0	254.5	259.7	267.8	271.5	280.5
Savings or Costs (-) Reflected in the Administration's 1996 Plan							
From the 1996 Funding Level Adjusted for Inflation							
Budget authority	n.a.	19.8	22.2	24.2	23.4	22.0	31.7
Outlays	n.a.	14.0	22.3	25.8	28.4	27.2	29.8
From the 1996 Funding Level							
Budget authority	n.a.	11.1	4.9	-1.7	-11.4	-21.8	-21.5
Outlays	n.a.	8.2	9.1	4.4	-1.9	-10.9	-18.0

SOURCE: Congressional Budget Office.

NOTE: n.a. = not applicable.

a. Value is a CBO projection.

Table 3-4.
Appropriations for International Affairs for Fiscal Year 1996 (In billions of dollars)

	Budget Authority	Outlays
International Development and Humanitarian Assistance	7.1	8.4
International Security Assistance	5.9	6.0
Conduct of Foreign Affairs	3.8	4.0
Foreign Information and Broadcasting Activities	1.1	1.2
International Financing Programs	0.6	0.3
Total	18.5	19.9

SOURCE: Congressional Budget Office.

icy actions that are needed to reduce spending by $147.5 billion.) Readers selecting the baseline that freezes discretionary spending at the 1996 level, however, must add $9.1 billion because, measured against the frozen baseline, the Administration's 1996 defense plan adds $9.1 billion to the deficit projections in Table 1-4 over six years (see Table 3-3). Although the plan's projections are lower for 1997 through 1999, projections for the entire 1997-2002 period average more than the 1996 level.

The third step is to subtract the additional savings that the selected options provide from the stream of deficit projections that results from the first two steps. Savings from individual options may be applied no matter which baseline concept is adopted.

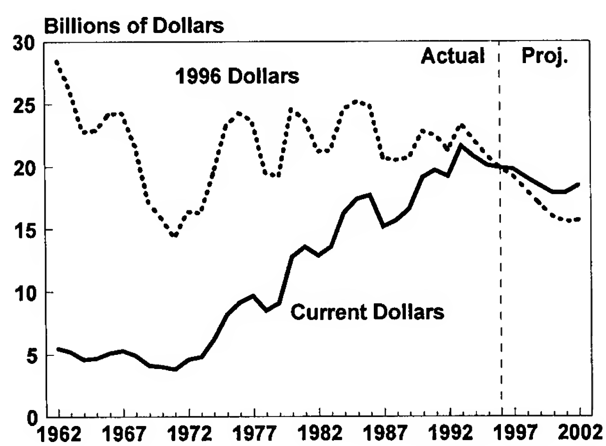
Of course, the Department of Defense's plans change from year to year. For some of the options in this chapter, the Administration's new program for 1997 through 2001 (the 1997 plan) makes significant changes to the 1996 plan. Those changes may increase or reduce CBO's estimates of savings. Readers using the details of this volume to estimate savings relative to the Administration's 1997 defense plan should refer to the savings estimates for those options shown in Appendix A.

The International Affairs Budget

Spending for international affairs is relatively low--less than a tenth of defense spending. The international affairs budget for 1996 totals $18.5 billion in discretionary budget authority and results in outlays of $19.9 billion (see Table 3-4). Those outlays represent 1.3 percent of total federal outlays and 3.7 percent of total discretionary outlays in 1996. Altogether, international programs consume 0.3 percent of the nation's gross domestic product.

In the past, the United States has spent a higher fraction of its budget and resources on international programs. In 1962, for instance, spending for international affairs totaled $5.5 billion--equivalent to $29 billion in 1996 dollars (see Figure 3-2). That amount represented 7.3 percent of total discretionary outlays and 1.0 percent of 1962 gross domestic product. During most of the 1960s, spending for international affairs declined both absolutely and as a share of the budget, reaching a low of $14 billion (in 1996 dollars) in 1971.

Figure 3-2.
Outlays for International Affairs (By fiscal year)



SOURCE: Congressional Budget Office based on data from the Office of Management and Budget.

From that level, spending rose by two-thirds in the 1970s, reaching $24.6 billion (in 1996 dollars) in 1980. Part of that increase reflected much greater levels of economic assistance for Egypt and Israel, agreed to as part of the Camp David Accords. Since 1980, real spending for international affairs has fluctuated between $20 billion and $24 billion. In the 1990s, caps on the category of international spending and, since 1993, on total discretionary spending have limited further growth in this budget function.

Options dealing with the international affairs budget are presented in DEF-45 through DEF-49. Those options cover a variety of topics, including activities of the State Department, exports of military equipment, grants and sales of food under the P.L. 480 program, and U.S. information programs abroad. Savings for each option are presented in two ways: against the 1996 level of funding for the program adjusted for inflation through 2002, and against the 1996 level of funding for the program. Which standard to use depends on the baseline the reader chooses to start with, as discussed above.

DEF-01 REDUCE NUCLEAR DELIVERY SYSTEMS WITHIN OVERALL LIMITS OF START II

Savings from the 1996 Plan	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	373	551	824	1,521	1,718	1,479	6,466
Outlays	104	294	528	882	1,249	1,455	4,512

With the end of the Cold War, the nuclear superpowers have begun to scale back the size of their nuclear arsenals. If put into effect, the second Strategic Arms Reduction Treaty (START II), which was completed in 1993, will require that long-range nuclear forces be cut to roughly two-thirds of their 1990 levels by early in the next century. The United States and Russia have begun to plan their nuclear forces within the framework provided by both of the START accords; Ukraine's decision of November 1994 to sign the Nuclear Non-Proliferation Treaty should greatly help to implement both START treaties. START II was ratified by the Senate in January 1996 but faces an uncertain future in Russia's parliament.

The Administration currently plans to deploy a strategic force in 2003 with 450 to 500 Minuteman III ICBMs (intercontinental ballistic missiles, each carrying a single warhead, although they can carry three), 66 B-52H bombers (each carrying an average of no more than 15 warheads), 20 B-2 bombers (each carrying 16 warheads), and 14 Trident submarines (each carrying 120 warheads). That force is based on the Pentagon's 1994 review of U.S. nuclear doctrine and forces (the Nuclear Posture Review). Overall, the United States would deploy almost 3,500 warheads--the maximum number allowed by START II.

This option would keep the same number of warheads that the Administration plans under START II, but it would load the warheads on fewer missiles and submarines and thus would retire some systems that the Administration proposes to retain in its plan. Under this option, the United States would retire four Trident submarines and 200 Minuteman III ICBMs relative to the plan (assuming that 500 ICBMs would have been deployed). It would preserve 300 Minuteman III ICBMs and 10 Trident submarines, each loaded with 24 missiles. The number of warheads deployed on the smaller Trident force would stay at the level planned by the Administration (1,680) by increasing the number of warheads on each missile from five to seven (see DEF-02). Like the Administration's plan, this option would retain 66 B-52H nuclear bombers, but they would carry an average of 16 warheads each for a total of 1,056 warheads. It would also keep 20 B-2 bombers, each loaded with 16 warheads--the same number planned by the Administration. Thus, the total strategic nuclear force proposed in this option would carry almost 3,400 warheads--roughly 100 fewer than the Administration proposes. Furthermore, no weapon system would be deployed with more warheads than it was designed to carry.

Compared with the Administration's plan, this option could save $373 million in 1997 and nearly $6.5 billion over the next six years. Those savings would come from reduced operation and support (O&S) costs and lower levels of investment. The O&S savings reflect the retirement of 200 Minuteman ICBMs. Investment savings would be achieved by canceling production of D5 missiles after buying six missiles in 1996, extending the service life of fewer Minuteman missiles, and forgoing the Administration's plans to reconfigure two Trident submarines so that they can carry new D5 missiles. Savings from retiring two additional Trident submarines would occur after 2002.

During the Cold War, this option might have raised concerns about stability. By putting more nuclear "eggs" in fewer baskets, the United States would have increased its vulnerability to a surprise attack. But today, with the most destabilizing nu-

clear modernization programs in the former Soviet Union terminated, fewer weapons at high states of readiness, and the end of the military competition between the North Atlantic Treaty Organization and the Warsaw Pact in Europe, those concerns have become less acute. The United States may now decide that it can save money safely by deploying its warheads on fewer weapon systems.

This option would also preserve flexibility for future developments. For example, it would retain three types of nuclear systems (the so-called triad) despite the recommendations of some analysts that all ICBMs be retired in order to save money. Retaining all three types provides a margin of security against an adversary's developing a new technology that might render other legs of the nuclear triad more vulnerable to attack. In addition, although ICBMs are considered the most vulnerable portion of the triad, at least a fraction of them would be able to survive virtually any type of attack by any country, even if they had been taken off alert.

Against this option's advantages, the Congress would have to balance a number of disadvantages. Carrying more warheads on bombers and submarines would diminish the targeting flexibility of U.S. planners. Unilaterally reducing the ICBM and ballistic missile submarine forces would also limit the ability of the United States to increase significantly the number of warheads it deployed in the event that Russia decided suddenly not to abide by START II. Indeed, some critics of this option and the Administration's plan argue that the United States should not relinquish any capability until Russia has fully complied with START I and ratified START II, because such a unilateral reduction would diminish U.S. leverage to persuade Russia to reduce its forces. Finally, by deploying fewer ICBMs, this option would reduce the forces that could be placed most easily in a nonalert but survivable status, an approach that some analysts have proposed recently to lower the chances of an accidental nuclear war.

DEF-02 TERMINATE PRODUCTION OF D5 MISSILES AFTER 1996

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	359	386	499	1,025	1,072	784	4,125
Outlays	76	186	307	519	758	876	2,722

The D5 missile, also called the Trident II missile, is the most accurate and powerful submarine-launched ballistic missile (SLBM) in the U.S. inventory. The result of more than 15 years of research and development, it is the keystone of the Navy's plan to modernize its ballistic missile force. Because of its accuracy and the size of its warheads, the D5 is the first submarine-launched missile that is capable of destroying very hard (or counterforce) targets such as missile silos and command bunkers. That capability will allow the Navy to assume some of the counterforce missions that previously could be carried out only by the Air Force's land-based intercontinental ballistic missiles and long-range bombers.

The Administration's plan, which reflects the results of the recent Nuclear Posture Review, assumes that the Navy will reduce the Trident force to 14 submarines by 2003, when the United States must fully implement the second Strategic Arms Reduction Treaty (START II). All 14 submarines will carry 24 D5 missiles. The Navy currently has eight Trident submarines that carry C4 missiles and is in the final stage of building a fleet of 10 additional Tridents armed with the more modern D5 missile. To achieve its 14-boat fleet, the Navy will retire the four oldest C4-capable submarines in 2002 and 2003 and convert the other four to carry D5 missiles (one each in 2000, 2001, 2004, and 2005). To support that force, the Navy plans to buy a total of 434 D5 missiles. It has already bought 343 missiles and plans to purchase seven more in 1997 and a total of 91 more through 2005. To keep the number of U.S. warheads near the ceiling allowed by START II, which limits the number of warheads on submarine-launched ballistic missiles to 1,750, the Navy will probably reduce the number of warheads per missile from eight to five (for a total of 1,680 warheads).

This option would terminate D5 production after 1996 and retire all eight C4 submarines. The Navy would have 343 D5 missiles--just four fewer than the number that it says it would need to support a 10-submarine force in light of its recent decision to reduce the number of D5 test flights to four a year. Like the Administration's plan, however, this option would not retire the C4 submarines until after the turn of the century, both to encourage Russia's compliance with START II and to retain the flexibility for the United States to remain at higher START I levels if Russia does not comply. To keep warheads at the level planned by the Administration under START II, this option would increase the number of warheads on each missile from five to seven.

Relative to the Administration's plan, this option would save $359 million in 1997 and $4.1 billion through 2002. Most of those savings would be from canceling missile production. In addition, retiring C4 submarines in 2000 and 2001 rather than upgrading them would save about $400 million in each of those years. This option would create significant savings beyond 2002 because it would operate fewer submarines and avoid the cost of modifying C4 submarines and purchasing D5 missiles.

Several drawbacks are associated with terminating production of D5 missiles. Increasing the number of warheads per missile from five to seven would reduce the range of the missiles by roughly 20 percent. That would limit the areas of the ocean in which submarines could operate, thereby making the fleet more vulnerable. Furthermore, it would reduce the targeting flexibility of the force because missiles with fewer warheads can cover more widely dispersed targets. Also, requiring the Navy to deploy D5 missiles with seven warheads would constrain the

United States' ability to increase sharply the size of its SLBM force by adding back the extra warheads if Russia broke out of START II or never ratified the treaty, a central concern of some critics of this option. (See Congressional Budget Office, *Rethinking the Trident Force*, July 1993, for more details about the effects of this and other options for reducing the costs of the Trident force.) In addition, reducing the force from 14 to 10 submarines may increase its vulnerability to attack by Russia's antisubmarine forces. Critics also worry that terminating the production of the D5 missile early would leave the United States unable to produce new SLBMs without an expensive rebuilding program.

Nevertheless, terminating D5 production may be acceptable given the marked reduction in the chances of nuclear war between the superpowers. In that environment, the capability retained under this option for Trident submarines to destroy hardened targets, which exceeds the capability of today's fleet of ballistic missile submarines, may be judged sufficient to deter nuclear war. Although the range of the missiles and the size of submarine patrol areas would be smaller under this option than under the Administration's plan, they would still exceed those planned during the Cold War when Russia's antisubmarine capability was greater and the United States intended to deploy the D5 with eight large warheads (W-88s).

The targeting flexibility given up by this option might not significantly reduce the ability of the SLBM force to deter nuclear war. It is not clear that the force of 1,680 warheads that the Administration plans to deploy on its Trident fleet under START II will deter an adversary more effectively if they are deployed on 336 missiles rather than on the 240 called for in this option. The diminished likelihood of nuclear war with Russia may also have weakened the rationale for the United States to deploy only five warheads on each D5 missile in order to retain its ability to increase U.S. nuclear forces rapidly. Moreover, the United States could increase the number of warheads on land-based ballistic missiles and bombers if Russia violated START II. Finally, supporters of this option would argue that the aerospace companies involved in refurbishing the Minuteman III and building boosters for space launchers will maintain enough skilled workers so that production of a new SLBM could be started in time to replace the missiles lost as Trident submarines begin to retire during the next century.

DEF-03 REDUCE THE SCOPE OF DOE'S STOCKPILE STEWARDSHIP AND MANAGEMENT PROGRAM

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	125	349	496	536	786	1,042	3,334
Outlays	94	293	459	526	723	978	3,074

For the first four decades of the nuclear age, the United States developed, tested, and produced nuclear weapons for its arsenal. The Department of Energy (DOE) and its predecessors have been responsible for that task. During much of the Cold War, the arsenal held over 25,000 warheads of more than a dozen different types. The weapons were designed and developed at the three weapons laboratories (Los Alamos, Lawrence Livermore, and Sandia) and tested at the Nevada Test Site; materials and components for the weapons were produced at more than a dozen facilities across the country.

The end of the Cold War has changed the requirements for the arsenal. In response to the second Strategic Arms Reduction Treaty (START II), the United States plans to keep roughly 5,000 warheads of seven different types in its active inventory beyond 2003. DOE has started to consolidate its production facilities as it adjusts to its declining workload.

The United States, along with all other declared nuclear powers except China, has also unilaterally halted all underground testing. To establish a permanent worldwide moratorium, it has been negotiating a comprehensive test ban (CTB) treaty that will make it difficult for any country to develop new weapons. The Administration would like the treaty to be completed as soon as possible.

To preserve its ability to ensure, over the long run, the reliability and safety of the weapons that remain in the nuclear stockpile under a CTB, the Department of Energy has developed a stockpile stewardship and management program. One goal of that program is to increase funding for activities such as computer simulations, hydrodynamic testing, and fusion research that will become increasingly important for ensuring the reliability of the stockpile in the absence of underground testing. Another goal is to ensure that the weapons labs continue to attract talented scientists by providing challenging work and state-of-the-art facilities. A third goal is to develop facilities that will produce the necessary nuclear and nonnuclear components to replace parts, thus ensuring reliability.

To carry out this plan, DOE will continue to operate both of its weapons design labs (Los Alamos and Lawrence Livermore) and its engineering lab (Sandia). It will also construct several new facilities to provide data on the reliability and safety of weapons as they age. Those facilities include the Dual-Axis Radiographic Hydrotest (DARHT) facility at Los Alamos for hydrodynamic tests and the National Ignition Facility (NIF) at Lawrence Livermore for research on the fusion portions of the weapons. In addition, DOE will conduct hydrodynamic tests at the Nevada Test Site so that it can retain enough skilled technicians to resume testing--as directed by the President--if the United States withdraws from the CTB for reasons of supreme national interests.

Under the stewardship program, DOE will spend \$1.6 billion in 1997 for what has been known historically as weapons research, development, and testing (RD&T), or about \$600 million less (after adjusting for inflation) than it spent in 1988 when the laboratories were still operating at a Cold War pace. However, the annual expenditures for RD&T under the Administration's plan, after adjusting for inflation, will still be about the same as in 1980 when the United States was both designing new warheads and

maintaining an arsenal of some 25,000 warheads. Further reductions in spending may therefore be possible.

DOE also plans to spend about $1.8 billion in 1997 to manage the stockpile and $2 billion or more each year thereafter. That spending includes an average of at least $400 million a year through 2002 to develop a new source of tritium, a radioactive gas that is used in all U.S. nuclear weapons and decays at the rate of 5.5 percent a year. Tritium is produced by bombarding special targets with neutrons. The neutrons could come from an accelerator or from the fissioning of uranium atoms within a commercial nuclear reactor. DOE recently decided to work on both technologies through 1998, at which point it will make a decision about which one to develop fully.

This option would reduce the scope of the stewardship program by consolidating the two design laboratories and forgoing all hydrodynamic testing activities at the Nevada Test Site. It would also reduce the cost of managing the stockpile by canceling the development of a tritium production accelerator and relying instead on less costly commercial reactors. Taken together, the changes in this option would save $125 million in 1997 and $3.3 billion through 2002 compared with the Administration's plan.

For illustrative purposes, the above savings assume that weapons design activities would be consolidated at Los Alamos over a period of five years; Lawrence Livermore would no longer have the designing of nuclear weapons as its primary focus. Los Alamos designed the majority of nuclear weapons that are likely to remain in the stockpile. To ensure that the other warhead types could be reliably maintained, some designers from Livermore would have to move to Los Alamos. This option would also maintain a cadre of weapons scientists at Livermore to provide peer review for Los Alamos's efforts. To ensure that those scientists had challenging work, Livermore would retain substantial computational facilities for modeling the complex processes inside nuclear weapons and would proceed with DOE's plans to build the National Ignition Facility. (The savings would be lower if stewardship activities were consolidated at Lawrence Livermore because that would involve moving more facilities and relocating more weapons designers. Also, the environmental issues raised by introducing new nuclear facilities into the populous area surrounding Livermore could prove difficult to overcome.)

Finally, by canceling the program to develop an accelerator to produce tritium and instead producing tritium in commercial reactors, this option would save $85 million in 1997, about $2.1 billion through 2002, and at least $10 billion over the life of the tritium source.

The central question underlying this option is, What is required to ensure the reliability and safety of the stockpile in the future if the current moratorium on underground nuclear testing is made permanent? DOE's stewardship and management program is the Administration's answer. This option preserves much of what the stewardship plan calls for, including DARHT and NIF, but does not preserve readiness at the Nevada Test Site or fund two full design labs. It also opts for an inexpensive source of tritium.

Some people may feel that this option cuts the program too deeply. They believe that DOE's stewardship program is the minimum effort necessary to maintain the stockpile without underground testing. Cuts would not be prudent, they argue, because scientists will need new facilities to obtain data on reliability that was formerly provided directly by underground nuclear testing.

Supporters of DOE's stewardship program also object to the consolidation proposed here. In their view, two design laboratories are essential for providing a robust stewardship program: competition and peer review will be even more important in the absence of underground testing. Furthermore, they argue, refocusing the efforts of one lab away from weapons research will eliminate its central unifying mission (and thus its motivation for excellence) without replacing that focus with an equally important mission. Consolidation will also result in the loss of some facilities that cannot easily be transferred to the other lab. For many of these reasons, the President recently directed DOE to retain both labs. Advocates of the stewardship program also disagree with this option's proposal to close the Nevada Test Site because doing so would increase the time required to resume underground testing if Russia started a new arms race or the United States discovered a serious

problem with its stockpile that could only be corrected by testing.

Other people argue that the stewardship program should be cut further than suggested in this option. Some believe that keeping part of a second lab, increasing money for basic stewardship, and building DARHT and the $1.1 billion National Ignition Facility are unnecessary to support the stockpile. In their view, those facilities may allow DOE scientists to continue designing and testing weapons and to circumvent a test ban treaty. Even if DOE has no intention of designing new weapons, they argue, the perception of such a capability may make it difficult to convince nonnuclear countries--from whom the United States would like continuing support for the Nuclear Non-Proliferation Treaty--that the United States has really given up testing. Other critics contend that the nation cannot afford to keep a portion of a second design lab or NIF; they argue that if NIF can help scientists understand how to harness fusion fusion for civilian energy, as supporters claim, it should be funded outside the nuclear weapons program.

There are several reasons to continue developing an accelerator for producing tritium. Although DOE has explored the idea of buying services from commercial reactors, and utilities that operate the reactors seem enthusiastic, forgoing the accelerator may be premature until DOE is certain that bureaucratic and political hurdles can be addressed and that commercial services will be available. Moreover, some groups argue that relying on commercial reactors to produce tritium will complicate efforts to control the spread of nuclear weapons because it blurs the distinction between military and civil nuclear programs. An accelerator is also appealing because it will not produce the radioactive waste that a reactor generates.

DEF-04 FOCUS THEATER MISSILE DEFENSE EFFORTS ON CORE SYSTEMS

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	295	373	400	676	836	891	3,471
Outlays	128	280	359	503	692	816	2,778

The Strategic Defense Initiative, which President Reagan started in 1983, focused solely on protecting the United States from a deliberate large-scale attack by Soviet ballistic missiles. The Bush Administration added an effort to protect U.S. troops and allies' civilian populations from attack by shorter-range "theater" missiles such as the Scuds used in the Persian Gulf War. The Clinton Administration--citing the urgency of the threat posed by theater ballistic missiles and the end of the Cold War--has reoriented the program to give priority to developing theater missile defenses (TMDs). It has also de-emphasized the effort to develop so-called national missile defenses, delaying indefinitely a decision to deploy defenses to protect the United States against longer-range missiles. To reflect those changes, it has renamed that effort the Ballistic Missile Defense (BMD) program. This option would make cuts in theater missile defenses beyond those proposed by the Administration.

According to its plan for 1996, the Administration will spend about $21.5 billion for all BMD efforts from 1997 through 2002--an average of roughly $3.6 billion a year. Nearly $2.6 billion of that amount will be spent by the Ballistic Missile Defense Organization on TMD each year. The remaining $1 billion will be spent each year on research and technology development for national missile defenses, management and support, and missile defense activities funded by the military services.

Under its restructured TMD program, the Administration will deploy a core package that includes both point defenses (which can protect relatively small targets like airfields or command facilities) and area defenses (to protect areas a few hundred kilometers in diameter). Specifically, the Army will deploy a point defense called the Patriot Advanced Capability 3 (PAC-3) and an area defense called Theater High-Altitude Area Defense (THAAD). The Navy will develop a sea-based point (or lower-tier) defense using the Standard missile that it deploys on its Aegis destroyers and cruisers.

In addition to the core systems, the Administration plans to continue developing three advanced-capability theater defenses: a Navy sea-based area defense; a mobile Army point defense called the Corps Surface-to-Air Missile (Corps SAM); and an Air Force airborne laser designed to destroy missiles early in their flight, before they can dispense submunitions and decoys that might overwhelm ground-based defenses. All three will be funded at a modest level through 1999.

To increase the area that THAAD and the Navy's area defense can protect, the Administration is developing space-based sensors, a constellation of satellites called the Space and Missile Tracking System (also known as Brilliant Eyes). The Administration will also develop a battle management system to enable the TMD systems to function effectively together. Finally, the Administration plans to continue paying for much of Israel's effort to develop the Arrow missile as an area defense system.

Some Members of Congress have expressed concern about the cost of developing so many apparently redundant systems, including both land- and sea-based point and area defenses. Some Members also question why the United States should bear all of the cost to develop area defenses like THAAD that will be used primarily to protect the civilian populations of other nations. Other critics are concerned that the Brilliant Eyes space-based sensor, the Navy's upper-

tier defenses, and the airborne laser proposed by the Administration will violate the terms of the Anti-Ballistic Missile (ABM) Treaty.

This option would save money by developing only the Administration's original three core TMD programs (Patriot PAC-3, the Navy point defense, and THAAD) and a battle management system. The three advanced-capability systems and Brilliant Eyes would be canceled. This option would continue all other TMD research and non-TMD programs at the Administration's planned level but would eliminate funding for Israel's Arrow missile. Relative to the Administration's plan for 1996, those actions would save $295 million in 1997 and nearly $3.5 billion over six years. Total savings relative to the 1997 request would be almost $200 million lower than from the 1996 plan because the Administration reduced spending levels for the advanced TMD systems. Savings would not be affected by the Administration's decision in its 1997 request to cut nearly $2.5 billion from THAAD and PAC-3 through 2002.

By canceling the Navy's upper-tier defense system, this option would reduce the flexibility of U.S. commanders during a crisis. Although sea-based defenses are limited to defending coastal regions, they can be deployed to a region quickly and do not require access to secure airfields to be airlifted into the theater--a limitation of land-based systems like THAAD if they are not already deployed in the region. The United States can also deploy sea-based defenses without having to obtain basing rights in another country, a process that could cause domestic political difficulties for some friendly governments. This option would preserve the capability to defend small areas such as ports or amphibious landings from the sea with the Navy's lower-tier point defense. But without the Navy's upper-tier system, the United States would not be able to defend larger areas such as cities until THAAD could be deployed. Nor could it use forward-based ships to defend large areas of Europe or Japan against attack from the Middle East or North Korea, respectively. The Congress is sufficiently impressed with the potential of the Navy's upper-tier system that it asked the Administration to make that system a core program in 1996.

Changes under this option would also limit the area that could be defended by the remaining systems. Canceling Brilliant Eyes would limit the area that THAAD could defend because ground-based sensors would take longer to detect and track incoming missiles, thereby reducing the range at which those missiles could be intercepted. Canceling Brilliant Eyes could also affect the capability of a future national missile defense system, if the United States eventually chooses to deploy one. In addition, terminating the airborne laser program would halt work on a system that has the potential to be effective against missiles armed with nuclear or chemical warheads, if technical problems can be overcome. Finally, cutting off funding for Israel's Arrow area defense missile would jeopardize a critical program for one of the United States' closest allies, which currently faces a real threat from ballistic missiles.

Notwithstanding those disadvantages, under this option the United States would still deploy capable land- and sea-based point defenses, a land-based area defense, and a battle management system, all according to the schedule proposed by the Administration. By eliminating all TMD funding beyond the core systems, this option would halt several programs early in their development phase. Furthermore, savings from this option could be used to restore the $2.5 billion that the Administration cut in its 1997 request. In addition to the savings over the next six years, those actions could save significant sums beyond 2002, when Brilliant Eyes and one or more of the advanced TMD systems would have entered full-scale development and production. This option would also eliminate payments to Israel to support development of the Arrow missile. In this period of tight budgets, it may be inappropriate to spend U.S. funds to develop a foreign system that the United States has no intention of buying.

In addition to lowering costs, this option would address critics' concerns that several of the planned TMD systems would violate the ABM treaty. Many ABM supporters argue that by effectively substituting for ABM radars, Brilliant Eyes would significantly increase the area that THAAD or the Navy's upper-tier system could defend and thus would violate the treaty. The contractor building THAAD has stated that the system's capability does not depend critically on Brilliant Eyes and that such sensors are needed only to defend the large areas required for national missile defenses. Since the Administration

has delayed indefinitely a decision to deploy national missile defenses, space-based sensors such as Brilliant Eyes may not be required for many years, if at all. Terminating the Navy's upper-tier defense would address concerns about its ability to defend large areas against intercontinental missiles--concerns that have been heightened by the Navy's claims that Aegis ships could indeed defend the United States against a limited ballistic missile attack. Halting the development of the airborne laser would also address concerns about its compliance with the ABM treaty.

DEF-05 CANCEL THE NEW ATTACK SUBMARINE

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	875	3,536	433	2,132	417	879	8,272
Outlays	298	1,139	1,360	1,532	1,290	1,066	6,685

NOTE: Savings are shown relative to the acquisition plan set out in the National Defense Authorization Act for Fiscal Year 1996.

As part of the overall reductions in military forces, the Navy is reducing its attack submarine force from 80 ships in 1996 to between 45 and 55 in 1999. To meet the overall force goal, the Navy is decommissioning some of its Los Angeles class (SSN-688) submarines before the end of their 30-year service life. At the same time, however, the Joint Chiefs of Staff (JCS) believe that the Navy will need 10 to 12 very quiet submarines by 2012 to compete with Russia's submarines, which have become quieter, making them harder to locate and track. To meet that goal and to maintain the industrial base for building submarines, the Navy is producing three Seawolf class submarines and is designing the New Attack Submarine (NSSN) to be their lower-cost successor.

The NSSN is the first submarine that will be less capable in many ways than its predecessor. It will be as quiet as the Seawolf but will be smaller and slower, carry fewer weapons, and not be able to dive as deep. Although the Seawolf was optimally designed for its primary mission of countering the more severe threat from Russia's submarines in the open ocean, the NSSN is being developed to operate in littoral waters close to potential regional foes.

Under the Clinton Administration's 1996 plan, the Navy purchased the third and last Seawolf in 1996 and planned to purchase the initial NSSN in 1998, the second in 2000, and two ships a year thereafter beginning in 2002. In the 1996 defense authorization act, the Congress instructed the Navy to gradually redesign the NSSN while producing one prototype ship each year from 1998 to 2001. The design for producing the new submarine, which would cost less and be more capable than the NSSN, will probably not be selected before 2003. CBO used this revised plan as a base case and assumed that production of the next-generation submarine would begin in 2003 at the rate of two per year and continue at that rate thereafter.

The Congress revised the Administration's plan because it was concerned about both the design and the cost of the NSSN. The 1995 conference report on defense appropriations reflected the conferees' concern that the Navy could not afford the research, development, and production costs. The Navy projected that completing the research and development (R&D) program would cost $2.9 billion and that producing the first ship would cost $3.2 billion (in 1998 dollars), though the Navy believed it could lower that cost to $1.6 billion per ship by the time the fifth ship was purchased in 2003. The conference report also noted that the Navy would not need to proceed with the NSSN for nearly 10 years to meet its goal for submarines and that continuing to produce a limited number of Seawolf class ships during that period would be less expensive than buying the NSSN.

This option would cancel the NSSN and purchase Seawolf submarines at a low rate. To help maintain the submarine industrial base and modernize the fleet, the option would produce a Seawolf every other year from 1999 to 2002 and one in 2003 and every year thereafter.

Canceling the NSSN and producing the Seawolf at low annual rates would save about $875 million in 1997 and $8.3 billion during the 1997-2002 period compared with the revised plan. Some of those savings would arise primarily from canceling the R&D

program costing $1.3 billion. In addition, producing two more Seawolf ships in 1999 and 2001 would cost $7.0 billion less through 2002 than producing four NSSNs, one each year from 1998 to 2001. From 2003 to 2006, buying four Seawolf submarines (one every year) would cost $7.5 billion less than buying eight next-generation submarines (two each year).

The Navy's R&D program for the NSSN is expensive, particularly since it will produce a submarine that is in many ways less capable than the Seawolf. The Congress directed the Navy to redesign the ship using new technology to improve the design and further reduce the cost. The principal benefit of any lower-cost submarine--being able to buy more of them--may be nullified if unit costs for follow-on boats fail to decline as the Navy projects. The Navy projected that costs for the NSSN would decline by about 50 percent from the first ship to the fifth ship. Yet when the 688I (the improved version of the 688 submarine) began production, the costs dropped only 15 percent from the first to the fifth ship. Those two cases may not be entirely comparable, however, because costs for the detailed design of the first ship of a newly constructed class of ships may be higher than costs for the first ship of an improved class.

Continuing to produce the Seawolf submarine would allow the Navy to cancel the research and development program for the NSSN. The Navy could continue a low-level R&D program ($100 million a year) to develop new technologies as Seawolf ships were produced, thereby hedging against the need for a new-generation submarine if current projections of the threat should worsen.

During the recent Congressional debate on producing the third Seawolf, the Navy emphasized that Russia, although financially strapped and therefore unable to operate its nuclear submarine fleet up to its potential, is still investing money to buy new, very quiet attack submarines at low rates. As a result of Russia's investments, the JCS has set the requirement for 10 to 12 very quiet submarines by 2012. (The Seawolf, the NSSN, and presumably the next-generation submarine would all be quiet enough to meet the JCS standard.) Because the Seawolf's original mission was to fight such highly capable submarines, building additional Seawolf ships might be a hedge against any return by Russia as a hostile and strong military power. Procuring one Seawolf every other year from 1999 to 2002 and one every year from 2003 to 2007, plus the three already authorized, would enable the Navy to field a force of 10 ships by 2012, meeting the JCS requirement.

Although the Seawolf can perform missions in littoral areas, it might be less capable of carrying out those missions than submarines that are specifically designed for that purpose--the NSSN or the next-generation submarine. For example, the larger Seawolf may not be able to get as close to shore as the NSSN in shallow waters. A larger ship, however, can carry greater numbers of special forces or Tomahawk missiles for attacking targets on land.

Continuing to produce Seawolf submarines at a low rate would also mitigate the effects on the submarine industrial base of canceling the NSSN. Although building Seawolf ships would do little to retain the capacity to design submarines, it would help maintain the industrial capacity to produce them. This alternative would probably provide enough work for only one of the two shipyards that can build nuclear submarines. If the alternative failed to provide the remaining yard with sufficient production work, that yard could take on some overhauls of existing submarines to help make up the difference. (Overhauls, which are usually done at public shipyards, use most of the skills required in building submarines.)

The low production rate might have a greater impact on subcontractors, but that effect could be mitigated in several ways: providing subcontractors with government subsidies, stockpiling critical components or shifting production of them to the shipyard, shifting other Navy work to the subcontractors, or using subcontractors to revitalize, modernize, or replace equipment on existing submarines. The industrial base for design (engineering and design teams) might be kept active by overhauling and modernizing existing submarines and developing additional technology to hedge against the need for a new-generation submarine. (The costs of those measures are not included in CBO's estimate of the savings for the option.)

DEF-06 REDUCE THE NUMBER OF AIRCRAFT CARRIERS AND AIR WINGS TO 10

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	346	930	1,186	1,229	1,273	1,320	6,284
Outlays	258	745	1,042	1,152	1,225	1,283	5,705

The aircraft carrier is the centerpiece of the U.S. Navy. The Administration's plan calls for a fleet of 12 carriers (11 active plus one carrier, manned partly by reserves, that can also be used for training) with 10 active air wings and one in the reserves to provide combat capability for those ships. The carriers will be accompanied by a mix of surface combat ships--usually cruisers and destroyers--and submarines that can attack planes, ships, and submarines that threaten the carrier. The surface combatants and submarines can also attack targets on land.

Some policymakers have argued that the United States does not need a force of 12 carriers in the aftermath of the Cold War. The total capability of all U.S. tactical aircraft in the Navy and Air Force will substantially exceed that of any regional power that seems potentially hostile. Cuts may therefore be acceptable.

Moreover, the capabilities of U.S. ships are unsurpassed worldwide. The Navy has ships other than carriers, including large flat-deck amphibious vessels, that can assist in maintaining a U.S. naval presence overseas in peacetime. Perhaps for these reasons, some policymakers have contemplated carrier force levels below those recommended by the Administration's plan. In 1990, before the breakup of the Soviet Union, the Chairman of the Senate Committee on Armed Services recommended a force of 10 to 12 carriers. And during the 1992 campaign, President Clinton called for a Navy with 10 carriers.

This option would retire two conventionally powered carriers early so that by 1998 the Navy would have 10 carriers (nine active carriers and one manned partly by reserves that could also be used for training). In addition, from the force of 10 active and one reserve air wings, it would eliminate one active air wing and leave nine active air wings and one reserve wing to match the number of carriers.

Compared with the 1996 plan, which has 12 carriers and 11 air wings, savings could total about $346 million in 1997 and roughly $6.3 billion over six years. All of those savings are from the reduced costs of retiring two carriers and one air wing. Costs to decommission the retiring ships are not deducted from the savings estimate. The Navy might realize procurement savings, also not included in the savings shown above. For example, the Navy might not need to buy as many DDG-51 destroyers for the smaller number of carrier battle groups (see DEF-07 for a discussion of the DDG-51). Also, the cut in air wings would reduce the number of required aircraft (see DEF-08 for a discussion of changes in procurement of naval aircraft).

According to former Secretary of Defense Les Aspin, reducing the force to 10 carriers would not impair the ability of the U.S. military to fight and win two regional wars that started nearly simultaneously. He argued, however, that having fewer ships would limit the Navy's ability to keep three carriers deployed overseas most of the time. In peacetime, some carriers spend time in repair; others are kept at U.S. ports to provide stateside duty time for their crews; still others are in transit to their operating stations. The Navy argues that only one-quarter or less of the carrier fleet can be deployed overseas in peacetime. Thus, reducing the fleet to only 10 carriers might mean that, much of the time, one carrier fewer on average could be deployed overseas compared with the level under the Administration's 1996 plan.

The Navy, however, may be able to maintain deployments with a smaller fleet. The factors the Navy used throughout the 1980s implied that about a third of the carrier fleet would be deployed overseas. Moreover, the Navy kept five of its 13 carriers overseas in the late 1970s. Based on that experience, the fraction of the carrier fleet that might operate routinely overseas is larger than the Navy's current formula would suggest, although according to the Navy such intensive use of carriers led to a number of problems. Alternatively, the same amount of overseas presence might be achieved with fewer carriers by basing another carrier overseas or shuttling crews and air wings between carriers.

Furthermore, a reduced overseas presence may be acceptable in the post-Cold War world. The United States would still have at least two carriers deployed overseas at any time, and possibly more if the Navy deployed a larger fraction of its carrier fleet. However, some missions, such as those requiring substantial numbers of fixed-wing aircraft, can be performed only by carriers. For example, carrier aircraft can be used to hit moving targets at longer ranges. In a crisis requiring such capability, a smaller force might mean an increase in the time before U.S. combat capability became available.

Alternatively, the Navy could use surface combatants other than the aircraft carriers to maintain a naval presence in peacetime and to assist in responding to crises. For example, it could use groups of ships centered around as many as 12 large flat-deck amphibious assault ships (smaller carriers) that are designed to transport the Marines and their equipment; those ships can embark helicopters and Harriers (Marine Corps attack aircraft that can land and take off vertically) and are as large as the aircraft carriers of many other countries. These Amphibious Ready Groups are fully capable of handling some missions usually performed by carriers, such as conducting limited strikes and evacuating noncombat personnel.

The Navy may also be able to meet some of its deployment requirements with groups of surface combatants that do not include any kind of carrier. Those formations have been made possible because the offensive capabilities of surface combatants have been augmented with the Tomahawk missile for attacking targets hundreds of miles inland and because their defensive capabilities have been enhanced by the Aegis system for defense against attacks from aircraft and antiship missiles. With the demise of the Soviet Union, a substantially reduced threat to U.S. ships also contributes to the feasibility of maintaining a presence with ships other than carriers. The Navy has already used formations without aircraft carriers to provide overseas presence. None of the formations, however, is as capable as a carrier battle group.

However, if policymakers continue to use aircraft carriers for overseas presence at current levels but the Navy has fewer vessels available, the time that ships spend at sea will have to increase. The high-quality sailors the Navy needs will therefore be spending more time away from their homes and families, thus making it harder for the Navy to retain them. According to a quantitative study by the Center for Naval Analyses, however, the problem of retention might not be severe and might be reversed by increasing compensation slightly.

DEF-07 REDUCE PROCUREMENT OF DDG-51 DESTROYERS

Savings from the 1996 Plan	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	1,396	0	1,136	1,091	1,208	1,277	6,108
Outlays	296	405	590	745	933	1,113	4,082

NOTE: The estimate of savings in 1997 assumes a purchase of four ships under the CBO base case.

The DDG-51 destroyers of the Arleigh Burke class would be used in a war to protect aircraft carrier battle groups and to attack land- and sea-based targets. The ships incorporate the Aegis combat system for air defense and the Tomahawk missile fired from the Vertical Launching System for land attack. Compared with previous classes of destroyers, the DDG-51s incorporate other improvements in speed, weapons, and armor. The Navy states that the DDG-51s also will be more difficult for enemy forces to detect because of design features that reduce their radar, sonar, and infrared signatures.

The Administration's 1996 plan will buy 23 more DDG-51s--an average of almost three per year from 1997 through 2004. In the 1996 defense authorization act, the Congress authorized an extra DDG-51 for that year but did not provide equivalent funding. It also authorized three ships for 1997. The Administration's 1997 plan adds one ship in 1997 to reflect Congressional action. (CBO's base case compensates for that addition by reducing the number of ships procured in 2002 from four to three.)

In contrast, this option would buy only 16 DDG-51s from 1997 through 2004 at a rate of two a year. Compared with the base case during the 1997-2002 period, this option would buy six fewer ships and could save about $1.4 billion in 1997 and $6.1 billion over six years. (The cost of each ship is about $1 billion.) The smaller fleet of DDG-51s in the next decade would also result in savings in operating and support costs that are not included in this option.

Reducing the number of DDG-51s purchased each year could have some disadvantages. Buying fewer DDG-51s might reduce the capabilities of the fleet by providing fewer ships that can perform multiple missions (such as strike and antiair, antisurface, and antisubmarine warfare). With the Navy's post-Cold War policy of deploying its ships more flexibly, which could require that surface combatants sometimes be deployed without an aircraft carrier, such capabilities might be more important.

Moreover, proponents of the Administration's plan might contend that the advanced capabilities of the DDG-51s will continue to be needed in the post-Cold War world. The sophisticated combat systems that the DDG-51 incorporates include the Aegis system, which is designed to stop attacks by large numbers of enemy aircraft and their antiship missiles attempting to saturate the air defenses of the aircraft carrier battle group. The hostile air threat to the U.S. Navy has declined with the breakup of the Soviet Union, and the smaller air forces of regional powers that the United States is most likely to fight are less capable of launching saturation attacks. Combat against regional powers, however, is likely to bring ships into littoral areas where they have less time to react to threats and thus might benefit from the quicker reaction of the Aegis system. Nevertheless, some analysts believe that the DDG-51, which was designed during the Cold War, is not optimally designed to fight in coastal areas and is too expensive to purchase in large numbers if the Navy's budget declines.

Only two shipyards currently build surface combatants, and reducing procurement to two vessels a year might sustain only one producer. The Congress would have to weigh carefully the possible effects of reducing the country's naval shipbuilding capabilities and the ability to reconstitute them if a change in threat required a buildup of forces.

In addition, savings from reducing purchases could be smaller than estimated under this option if the unit cost per ship rose because overhead was spread over fewer units produced. If reduced purchases caused one shipyard to close, the remaining shipyard might be able to charge higher prices that might offset some or all of the savings from lower production. In addition, if the remaining shipyard had to finish building ships that the closing shipyard had begun, the unit costs of those ships might rise. The government, however, might be able to arrange for the closing shipyard to finish ships under construction before going out of business.

The Navy might be able to minimize such growth in unit costs. Even if only one shipyard remained, the government--a single buyer that has many alternative uses for its limited procurement budget--might be able to exert pressure on that yard to restrain costs. Indeed, one approach the Navy could take would be to let the two shipyards bid competitively for a single contract covering all 16 ships purchased during the 1997-2004 period. The size of such a contract would guarantee competitive bidding. In the longer term, closing a shipyard might reduce the Navy's costs by eliminating excess naval shipbuilding capacity.

Reducing the number of DDG-51s, as proposed in this option, need not limit the Navy's ability to counter regional threats. For example, the combination and automation of sensor inputs and weapons in non-Aegis ships may allow them to react faster to the shorter-range threats in regional conflicts. Advances in communications may allow a ship with the Aegis system to control the weapons of all other ships in a group, shortening the reaction time of the entire group. In addition, according to a press report, the Navy already has a shortage of Tomahawk missiles to be carried on existing ships, including the DDG-51, that have the Vertical Launching System.

Considering the reduced threat, the Navy may already have enough sophisticated Aegis ships. With the 77 Aegis ships that would eventually be available under this option (27 CG-47 Ticonderoga class cruisers, 34 DDG-51s funded through 1996, and 16 future DDG-51s), two could be assigned as escorts to each of the 12 aircraft carrier battle groups, leaving 53 available for independent operations. In addition, the Navy would need fewer Aegis ships to escort carrier battle groups if the number of carriers was reduced (see DEF-06) or if lower threat levels warranted assigning only one Aegis ship per battle group. Because of the reduced threat, the Navy is already lowering the number of surface combatants assigned to escort and protect the aircraft carrier.

In the longer term, procuring fewer DDG-51s would exacerbate the Navy's difficulty in maintaining its force goal of 346 ships. In recent years, requirements for overseas presence have prompted the Navy to increase the goal from about 330 ships to 346. Yet the Administration's 1996 plan produces an average of about five ships per year during the 1997-2001 period. Assuming that the average life expectancy of a ship is 30 years, continuing that rate of procurement would stabilize the size of the fleet at about 150 ships. Producing fewer DDG-51s per year would reduce the fleet even further unless the funds were used to procure a greater number of less expensive ships. With lower threat levels in the post-Cold War era, however, a smaller fleet of highly capable ships might be adequate. Most navies, especially those of potential adversaries, have smaller and less sophisticated ships than the DDG-51.

DEF-08 CANCEL THE UPGRADE OF THE NAVY'S F/A-18 FIGHTER AND BUY THE CURRENT MODEL

Savings from the 1996 Plan	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	2,074	2,317	2,397	2,462	2,131	3,038	14,418
Outlays	411	1,061	1,763	2,142	2,277	2,432	10,086

NOTE: The Administration, in its 1997 budget request, has revised its plan for this system. Appendix A shows savings against the 1997 plan.

For the foreseeable future, the F/A-18 aircraft will account for the bulk of the Navy's fleet of carrier-based aircraft that perform fighter and attack missions. The F/A-18 attacks targets both in the air (the fighter mission) and at sea or on the ground (the attack mission). The current version of the F/A-18 is designated the C/D model.

In 1991, the Navy announced plans to develop a new E/F variant of the F/A-18. The E/F version features several modifications: a longer fuselage, a larger wing, and a more powerful engine than are now on the C/D version. Those changes should enable the E/F to carry a larger load of weapons than the C/D, or to carry a combat load about 40 percent farther. Both attributes are important factors in determining the plane's capability in the attack role. The new engine should also enable the heavier E/F aircraft to retain the speed and maneuverability of the earlier version, important performance considerations in fighter combat. McDonnell Douglas Corporation, the plane's manufacturer, also points to the lowered signatures of the E/F, billing the plane as the Navy's first fighter aircraft with low observable characteristics. Such characteristics increase the likelihood that planes will survive to perform their missions.

Though more capable, the E/F version will also be more expensive than the C/D model--about 38 percent more by some estimates--and the Navy will have to pay about $1.1 billion from 1997 through 2002 to complete development of the plane. This option would cancel development and procurement of the new E/F model and instead would buy sufficient additional C/D aircraft to maintain the Administration's planned production rates. Compared with the 1996 plan, savings would total about $2.1 billion in 1997 and $14.4 billion over six years. Savings from the 1997 plan would be slightly less, about $12.9 billion over six years. Savings from canceling the upgrade might be larger if the F/A-18 experienced unanticipated cost increases.

The requirement for an upgraded F/A-18 aircraft may be questionable in view of today's reduced military threat. The threat to carrier battle groups stemmed largely from the former Soviet Union, and the possibility of conflict with the former Soviet republics now seems increasingly remote. Regional powers are not likely to be able to match the capability of current U.S. fighters for many years. But if the enhanced fighter capabilities offered by the E/F version are not needed, neither may be its added attack capabilities, based on the Navy's judgments about other systems. The Navy plans to retire its venerable but longer-range A-6 fleet in 1997 and has canceled development of a new longer-range replacement, the A/FX, at least in part because the service now places less emphasis on the deep strike mission and more on supporting Marine forces that operate at relatively short ranges from the ships that transport and support them. Such reservations about whether F/A-18 E/F enhancements are needed may have led the Marine Corps, which also flies the F/A-18, to question whether it would pursue E/F purchases or keep buying the current model.

Even if the added capabilities of the E/F model are needed, trends in the F/A-18 program suggest that they may be hard to achieve. Some critics of the program have noted that the A/B model of the F/A-18 attained only about 75 percent of the originally speci-

fied goal for the fighter's range, and the C/D model achieved only about 70 percent.

Canceling the E/F development program would have some disadvantages. Even in conflicts with smaller nations, improvements in the F/A-18's range, if they materialize, might be useful in the attack mission; indeed, critics of the C/D version believe its relatively short range limits its usefulness. Moreover, now that the A/FX has been canceled, the E/F upgrade will be the only major upgrade the Navy will purchase for its fighter fleet for at least 10 years.

DEF-09 CANCEL THE MARINE CORPS'S V-22 AIRCRAFT PROGRAM AND BUY CH-53E HELICOPTERS

Savings from the 1996 Plan	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	1,098	1,001	899	826	1,235	2,042	7,100
Outlays	385	689	779	743	775	1,007	4,378

NOTE: The Administration, in its 1997 budget request, has revised its plan for this system. Appendix A shows savings against the 1997 plan.

The V-22, a new plane entering production in 1997, is intended to help the Marine Corps perform its amphibious assault mission of seizing a beachhead in hostile territory and its subsequent operations ashore. V-22s will transport up to 24 marines or 10,000 pounds of their equipment, moving either from amphibious ships to the shore or from one shore base to another. The plane employs a tilt-rotor technology that enables it to take off and land vertically like a helicopter and, by tilting its rotor assemblies into a horizontal position, become a propeller-driven airplane when in forward flight. The V-22 will be able to fly faster than conventional helicopters; it will also fly longer distances without refueling than other Marine Corps helicopters and thus can "self-deploy" rather than be carried to distant theaters on planes or ships, the common mode of transport for conventional helicopters. The Marine Corps argues that analysis indicates that the V-22's increased speed and other characteristics of its design will make it less vulnerable when flying over enemy terrain.

Despite all of these advantages, the Bush Administration tried to cancel the plane, largely because of its expense. At a projected unit cost of more than $54 million (in 1996 dollars), the V-22 costs considerably more than most conventional helicopters. The V-22's flyaway cost, a price that excludes some items bought with procurement funds, averages about $42 million (also in 1996 dollars).

Notwithstanding the V-22's high cost, the Congress has continued to fund it, providing almost all of the funding the Clinton Administration requested in 1996 to continue development and begin procurement. The Marine Corps plans to buy a total of 425 V-22s. Another 50 planes might eventually be bought for special operations forces, and the Navy plans to buy 48 for combat search-and-rescue missions and for logistics support of its fleet.

At present, the Marines use helicopters to transport personnel and equipment in amphibious missions. One helicopter--the CH-53E, which carries heavier loads than the V-22 and costs about half as much to procure--will continue to transport Marine equipment even after the V-22 is fielded. The Marines will continue to need some CH-53Es to meet requirements for lifting heavier equipment, but the Administration bought the last of those helicopters in 1994.

This option would cancel the V-22 and continue procurement of CH-53Es. It would buy six CH-53Es per year from 1997 through 2002, half the number bought in 1994. It would also cancel development and procurement of the V-22 special operations variant and purchase no replacement. Presumably, the Department of Defense might develop and procure a special forces aircraft at some later date. Relative to the Administration's 1996 plan, the option would save nearly $1.1 billion in 1997 and $7.1 billion over six years. Savings from the 1997 plan would be slightly lower--about $6.7 billion over six years. In addition to saving money, buying CH-53Es might entail less risk than developing a V-22. Two of five V-22 prototypes have crashed, as has one of two XV-15 aircraft built to demonstrate tilt-rotor technology. The Marine Corps argues that the problems that caused those crashes have been remedied without substantial design changes. But the crashes may suggest problems with the design. If problems exist,

developers may need to increase the already high costs of the plane or reduce its capability.

The Marines Corps argues that the CH-53E does not meet its requirements for the amphibious assault mission for a number of reasons. First, the slower CH-53E is less likely than the V-22 to survive in hostile environments. Even if the V-22 is purchased, CH-53Es will be needed to transport heavy items of equipment that the V-22 cannot carry. Since many of those items will be needed early in battle, CH-53s will therefore need to be part of the first assault wave. But Marine Corps doctrine dictates that the first assault wave be delivered by a more survivable aircraft than the CH-53E. Furthermore, Marine Corps personnel suggest that CH-53Es might not be able to build up sufficient forces fast enough to stop enemy troops who might arrive soon after operations begin. Smaller U.S. forces would increase the likelihood of a U.S. defeat or potentially increase the number of casualties. The problem of building up forces quickly might be at least partially overcome if each CH-53E carried more troops, but the Marine Corps argues that CH-53Es are too unwieldy and vulnerable to carry large troop loads.

Marine Corps personnel also argue that the CH-53E, or indeed any other current helicopter, is unacceptable because it cannot deploy overseas without substantial assistance and risk. Many current helicopters can make the relatively long trips over water required to deploy in the Pacific, but they must refuel in flight, requiring the assistance of tanker aircraft, and their slower speed increases the chance that pilot fatigue will result in missing a tanker rendezvous or cause other mishaps. A final argument in favor of buying the V-22 is that it provides capabilities that may be particularly useful in peacekeeping contingencies such as the Bosnian operation and hence worth developing if the United States is more likely to engage in such operations. For example, since V-22s fly faster than conventional helicopters, they might be better at landing personnel and equipment in remote sites and rescuing pilots from downed aircraft.

DEF-10 REDUCE AIR FORCE TACTICAL FORCES

Savings from the 1996 Plan	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	253	521	537	554	570	586	3,020
Outlays	191	430	493	528	553	574	2,769

The military forces proposed by the Administration include 20 tactical air wings--13 active and seven in the part-time reserves--six fewer than the Bush Administration planned to have. (Traditionally, an Air Force tactical air wing has consisted of 72 combat aircraft, plus about 28 aircraft for training and maintenance, though the service may be revising that concept.) Substantial disagreement exists about whether all of those forces are needed, since U.S. tactical aircraft enjoy overwhelming superiority compared with the forces of regional powers that appear potentially hostile to the United States. Perhaps for that reason, former Secretary of Defense Les Aspin, when he was the Chairman of the House Committee on Armed Services, recommended in 1992 that the Air Force retain only 18 tactical wings--10 active and eight reserve.

This alternative would follow that recommendation and further reduce the tactical fighter forces in the Air Force to 18 wings by the end of 1997. So rapid a schedule for reductions should be feasible inasmuch as the Air Force has reduced the size of its fleet quickly in the past; for example, it eliminated six wings during 1991 and 1992. Moreover, the six additional wings the Clinton Administration offered to eliminate will have been cut by the end of fiscal year 1996. Reducing the number of Air Force wings from 20 to 18 would lower the service's operating costs by $253 million in 1997 and by $3 billion through 2002. Additional savings might accrue from buying fewer aircraft, but those savings are not included in the table above. (See DEF-11 for a discussion of changes in procurement of Air Force tactical aircraft.) CBO assumes that savings from the Administration's 1997 plan will be the same.

Still further savings might be possible if the Air Force accompanied the force reduction with a reorganization that increased the number of planes per squadron and eliminated more squadrons. That practice, known as "robusting," allocates resources more efficiently since each squadron or wing has high fixed costs. Increasing all Air Force squadrons to 24 planes could add significantly to the savings shown above.

In addition to achieving savings, a reduction to 18 Air Force wings could still leave the United States with an acceptable level of military capability in the post-Cold War world. *Balance and Affordability of the Fighter and Attack Aircraft Fleets of the Department of Defense*, an April 1992 CBO analysis of several potential adversaries (North Korea, postwar Iraq, and Cuba), found that after reducing the number of tactical air wings to 26 as proposed by the Bush Administration, the capability of the tactical aircraft in the U.S. Air Force exceeded that of the other countries by factors of 22, 24, and 56, respectively. (The analysis was based on a scoring system developed for the Department of Defense.) The large margin of superiority suggests that even after eliminating six wings, additional reductions may be feasible without sacrificing the U.S. advantage.

Retaining only 18 wings in the Air Force, however, would not meet the military's current estimate of its requirements. Analysis by the Department of Defense suggests that 20 wings would be the minimum needed to win two nearly simultaneous regional conflicts. Today's U.S. force planning assumes that the United States needs to be able to fight virtually simultaneous wars in two regions of the world--one

in the Middle East and another perhaps in Asia. If one accepts that requirement, then the Air Force may well need more than 18 wings.

Some analysts would also argue that additional cuts in Air Force wings ignore a major lesson from the war with Iraq: aerial bombardment by tactical aircraft can be quite effective and may greatly accelerate the end of a war, thus reducing the loss of lives among U.S. ground troops. A sizable inventory of tactical aircraft, perhaps more than would be maintained under this option, may therefore be a wise investment.

DEF-11 CANCEL THE AIR FORCE'S F-22 AIRCRAFT PROGRAM

Savings from the 1996 Plan	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	2,053	2,352	2,219	3,035	3,959	4,607	18,225
Outlays	916	1,475	1,511	1,724	2,032	2,512	10,169

NOTE: The Administration has delayed procurement of F-22s in its 1997 plan. See Appendix A for estimated savings compared with the Administration's 1997 budget request.

The F-22 aircraft is being developed as the Air Force's next premier fighter and is scheduled to begin replacing the F-15 aircraft around 2000. Fighter aircraft are designed primarily to destroy enemy planes, thus guaranteeing the United States and its allies control of the air. The Air Force wants the F-22 aircraft to have supersonic cruise speed as well as stealth characteristics that make it difficult for enemy sensors to detect. The F-22 would also be designed to fly long distances and to have highly effective avionics that could make it more capable than other fighters in many types of combat. The F-22 entered full-scale development in 1991, and according to the Administration's 1996 plan, the first F-22s were to be bought in 1998. Changes revealed in the 1997 program suggest that the Administration now plans to defer purchase of the first fighters until 1999. (The Administration will still buy four aircraft in 1998, but they will be funded with development moneys and will probably be used mostly for testing.)

This option would cancel the F-22 program on the grounds that its additional capability may be both unnecessary and too expensive. Compared with the 1996 plan, canceling the F-22 would save about $2.1 billion in 1997 and $18 billion for the 1997-2002 period. Savings from the 1997 plan would be nearly the same. (The total estimated savings include procurement, research and development, and military construction.)

The high cost of the F-22 is one argument for canceling it. The Air Force planned to buy 648 aircraft in January 1993 at a total cost of about $76 billion in 1996 dollars ($86.6 billion in current dollars). The average unit procurement cost of the F-22 would have been about $87 million in 1996 dollars. Now the Air Force seems likely to buy no more than 442. Total program costs declined by only 21 percent (in 1996 dollars) even though the total quantity fell by nearly a third. The reduction in quantity, and other factors, pushed up the unit procurement cost of the F-22 to about $94 million (in 1996 dollars), about 8 percent more than the estimate provided in January 1993 and roughly 70 percent more than the average cost of the F-15E.

Since the costs of many weapon systems increase during the full-scale development phase that the F-22 entered in 1991, actual costs could rise even more. For example, the F-22's cost could increase if the Air Force has to fix design flaws. The Air Force argues that the April 1992 crash of the only flying prototype of the F-22 was caused by the way the aircraft was operated and that certain operating restrictions or, at most, minor software changes should prevent future problems. But such mishaps may portend costly production problems. Some recent press reports also suggest that the F-22 may be experiencing other development problems, such as increases in weight, that can raise its costs. And unit costs will rise if F-22 procurement is reduced even further below planned levels, as seems likely.

Events in the Persian Gulf War suggest that current Air Force aircraft are able to counter any threat less severe than that formerly posed by the Soviet Union, which many analysts consider to have been the only hostile country whose air force had the capability to threaten U.S. fighters. In view of that re-

duced threat, the F-22 may provide more capability to attack enemy fighters than the United States needs.

Moreover, other types of aircraft may prove to be more useful in future conflicts. The extensive use of tactical bombing in the Persian Gulf War emphasizes the value of aircraft that can attack land targets, perhaps in preference to aircraft such as the F-22, which is designed to combat enemy fighters. Given the changes in the nature of the threat, strategies other than buying expensive F-22 aircraft might better meet the Air Force's future needs. Such strategies might include upgrading existing aircraft or developing a new plane that is less capable but cheaper than the F-22.

Nor does the Air Force need to buy the F-22 any time soon to support the reduced size of its tactical forces. CBO's analysis suggests that even if the Air Force procured no fighter aircraft after 1993, it would have more than enough through at least the middle of the next decade, though it would experience shortages in its overall tactical fighter fleet around the turn of the century.

The Air Force contends that the improved capabilities of the F-22 aircraft are required even in a world in which U.S. tactical air forces are smaller and the threat is much reduced from that posed by the former Soviet Union. If the United States canceled the F-22 program, the capability of its fighters through the first decade of the next century would be similar to that of today's F-15 aircraft, which entered development in the 1960s. By the next decade, some regional powers may possess fighter aircraft that are at least the equal of the F-15. Thus, the Air Force believes that the United States, to maintain its edge, needs the improved capability the F-22 aircraft offers. The Air Force also raises concerns about increased threats from the ground that may degrade the survivability of current aircraft. Modernizing surface-to-air missile systems, which may be more accessible to regional powers, may also be cheaper and easier than modernizing fighter fleets. To counter those threats, fighters may need the improved capabilities of the F-22, including stealth and higher speed.

The Department of Defense has recently announced its intention to provide the F-22 with capabilities to perform the ground attack mission--a plan that may be the Administration's response to criticisms that the F-22 is less useful in regional conflicts if it is a pure fighter aircraft. The F-22's capability to attack targets on the ground may be modest, however, according to some press reports. And its ability as a bomber will undoubtedly be less than that of a plane developed primarily for the bombing mission.

DEF-12 BUY NO MORE THAN 40 C-17s AND BUY COMMERCIAL AIRLIFTERS INSTEAD

Savings from the 1996 Plan	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	2,582	1,779	918	832	538	565	7,214
Outlays	166	740	1,347	1,406	1,175	1,079	5,913

NOTE: The Administration, in its 1997 budget request, has revised its plan for this system. Appendix A shows savings against the 1997 plan.

The C-17 Globemaster III is a four-engine transport aircraft that can carry a cargo payload of at least 110,000 pounds for a distance of 3,200 nautical miles without aerial refueling. It is being produced as the next-generation airlift aircraft to replace the C-141 Starlifter. Because it is designed to land at relatively small airfields with short runways, the C-17 might also play a role in meeting transport needs within a combat theater and could substitute for other aircraft, such as the C-130, that traditionally perform that role.

The Congress has already authorized 40 C-17 aircraft through 1996. In 1993, the Administration placed the C-17 program on probation because the plane's producer experienced difficulty controlling the aircraft's costs and quality. Since then, however, McDonnell Douglas has delivered new C-17s on time, reduced the number of manufacturing defects, and taken steps to lower production costs. After observing how the initial squadron of C-17s has operated and reviewing the costs and capabilities of two alternative airlift planes (the new D model of the Lockheed C-5 and the C-33, a Boeing 747-400 freighter modified for military use), the Administration announced in November 1995 that it will plan and budget for 80 additional C-17s (a total purchase of 120 aircraft). If the Congress purchases the planes relatively slowly (building up to a maximum of 12 C-17s per year in 2001), that plan will require approximately $25.4 billion in funding to complete. In its 1997 plan, however, the Administration has proposed buying 80 more C-17s using multiyear procurement and a more aggressive schedule of purchases (building up to a maximum rate of 15 planes per year by 2000). The Department of Defense estimates that completing the purchases under the new plan will cost $22.1 billion.

This option would instead keep the C-17 fleet at 40 aircraft and substitute purchases of 56 wide-body commercial aircraft such as the C-33. Those purchases would provide the Air Force with roughly the same amount of airlift capability as 80 more C-17s. Compared with the 1996 plan, this option would save about $2.6 billion in 1997 and $7.2 billion over six years. That estimate includes the cost of operating a larger number of C-141s than the Air Force currently plans in order to keep airlift capability at the same level until the C-33s are delivered. Compared with the Administration's plan to purchase 80 C-17s more quickly, the option would save nearly $2.2 billion in 1997 and $8.1 billion through 2002.

The option would minimize purchases of a plane that is significantly more expensive than other strategic airlift aircraft. CBO estimates that purchasing another 80 C-17s at an annual rate of 12 aircraft (after 2000) would result in an average unit procurement cost of $262 million (in 1997 dollars). By comparison, the C-33 would cost about $190 million per plane (in 1997 dollars). Since the C-33 would be manufactured on the same well-established production line as commercial 747s, its cost would be much less sensitive to the number of planes purchased each year. Restarting the C-5 manufacturing line and producing 65 of the D model aircraft would cost an average of about $182 million per plane. However, since the D model includes significant upgrades that have not yet been demonstrated, that program may present a greater degree of technical risk than the C-17 or C-33. Both the C-33 and C-5D have larger average

payloads than the C-17, and thus DoD might be able to purchase fewer than 80 of them.

Critics of the C-17 program contend that the Air Force may not need as much capacity to carry outsize cargo as 120 C-17s would provide. For example, nearly half the total cargo airlifted during the early stages of the Persian Gulf War could be fit on standard pallets (so-called bulk cargo), as was nearly two-thirds during the peak months of airlift operations (January and February 1991). Civilian wide-body jets can deliver bulk cargo more efficiently than the C-17, but they cannot fit most pieces of outsize cargo such as an M1 tank or an Apache helicopter.

Defense Department officials claim that a key factor in their decision to purchase 80 more C-17s was the plane's size. Since the C-17 is smaller than the C-33 and easier to maneuver on the ground, DoD believes that a fleet of 120 C-17s could deliver more cargo than a fleet with fewer C-17s and some C-33s--particularly if there were few airfields available and only a limited amount of ramp space. In addition, commercial planes require long runways and special equipment to be loaded or unloaded. Yet in a recent analysis of cost and operational effectiveness that took those factors into account, the Air Force estimated that a fleet of 40 C-17s plus 56 C-33s could deliver nearly as much as a fleet with 120 C-17s: 96 percent (by weight) of the amount of outsize cargo to two major regional contingencies that occurred nearly simultaneously.

Opponents of this option would argue that at a time when the U.S. military is preparing to face diverse regional conflicts on short notice, the Air Force needs more of the versatile C-17 airlifters. A recent study by the Secretary of Defense's Director for Program Analysis and Evaluation found that if the United States became involved in crises in which it would need to perform special military missions, U.S. forces might need more than 40 C-17s. For example, the Army has a military requirement to be able to perform airdrop operations with brigade-size forces from the United States to contingencies overseas--a mission that might require more than 40 C-17s. Although the Air Force is likely to use its current C-5s to air-drop heavy equipment and bundles of cargo, it may still need more than 40 C-17s to air-drop personnel and the remaining equipment.

Having more C-17s could also be important if the United States became involved in lesser regional contingencies in which U.S. forces needed to deliver large amounts of heavy equipment to an area that had few, small airfields. As recent airlift operations to Bosnia show, however, the speed with which cargo must be delivered can vary considerably. And fewer C-17s combined with C-33s or C-5Ds would probably be adequate for smaller operations like the U.S. humanitarian intervention in Rwanda in 1994 and 1995.

DEF-13 DEFER MODERNIZATION OF TACTICAL AIRLIFT

Savings from the 1996 Plan	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	112	111	109	109	108	109	658
Outlays	7	34	70	93	101	105	410

NOTE: The Administration, in its 1997 budget request, has revised its plan for this system. Appendix A shows savings against the 1997 plan.

The C-130 Hercules is an airlift plane that the Air Force uses to transport cargo and supplies within a theater of operations. The C-130 is much smaller than strategic airlifters like the C-17 or C-5, which can carry an average of at least three times more weight over much longer distances. Nor is it big enough to carry the largest pieces of equipment such as Apache helicopters or Patriot missile batteries.

Nevertheless, the C-130 remains a critical element of the Air Force's tactical airlift fleet. Lockheed Martin has produced more than 2,100 of those aircraft over the past 40 years, and the C-130's airframe has proved highly effective and versatile. Its turboprop engines do not ingest loose dirt and materials from unpaved runways, thus giving the C-130 better access to austere airfields than the turbofan engines used in most strategic airlifters. The turboprop engine also permits more rapid changes in thrust than most turbofans, which contributes to the C-130's ability to take off and land on short runways and descend quickly into airfields that are hard to reach. And since the average unit procurement cost of the J version is about $55 million, the Air Force could purchase at least three C-130Js for the price of one C-17, which some defense analysts would like to use for tactical airlift operations.

To produce the J version, which the Air Force is now buying, Lockheed Martin has taken the basic airframe of the C-130 and upgraded a number of the plane's systems. For example, the C-130J includes an integrated avionics system that eliminates the need for a flight engineer and incorporates a new engine that is more powerful and fuel-efficient. The plane can be modified for in-flight refueling, although the Air Force did not request that capability in the basic C-130Js that it is purchasing.

The Air Force maintains a fleet of about 400 C-130s for tactical airlift. The Congress authorized the purchase of two new C-130Js in 1996 to replace the Air Force's older E version aircraft in the active-duty forces, and last year the Administration had planned to continue procuring two per year. In its most recent plan, however, the Administration proposed buying only one C-130J in 1997, followed by two per year throughout the 1998-2001 period. Although the C-130Es are the oldest of those aircraft, until recently the Air Force had no plans to begin retiring them until the middle of the next decade.

Identifying a clear numerical requirement for the C-130J, however, is difficult. The Air Force sent only 149 of its large inventory of C-130 aircraft to the conflict in the Persian Gulf. Since they move equipment and supplies from main operating bases closer to the battlefront, a substantial number of C-130s may be needed during two major regional contingencies that occurred at nearly the same time. But predicting the type and number of intratheater airlift movements that would be needed is difficult, and other modes of transportation such as trucks, trains, and watercraft can substitute for some airlift deliveries.

This option would postpone procurement of C-130Js until well into the next decade. Relative to the Administration's 1996 plan, deferring modernization of the C-130 would save about $110 million per year, or a total of $658 million over the 1997-2002 period. In its budget request for 1997, the Administration

proposes buying one C-130J in 1997 and two planes per year thereafter. Compared with that plan, the option would save $72 million in 1997 and $668 million over the next six years.

As with all cuts in weapons programs, this option would eventually have negative repercussions on the defense industrial base. Following in a long tradition of export sales to more than 60 countries, Lockheed Martin is currently building a stretch model of the C-130J for Britain and Australia and may sell others to replace the C-130s it sold abroad years ago. The manufacturer used its own financial resources to develop the upgrade program, which it hopes to recoup with the first 120 planes it sells. If the U.S. Air Force purchased the J version today, that might also help to secure export sales in the world market.

Critics of this option might also argue that it would leave the Air Force with a less capable fleet of intratheater airlift planes. In recent years, the Congress appropriated funds to purchase new C-130s for the Air National Guard and Air Force Reserve, but many of the older E version remain in the Air Force's inventory. Ultimately, an older fleet might prove more expensive to operate and support. Lockheed Martin contends that since the J version uses a smaller crew and will be easier to maintain, the annual cost of operating and supporting a squadron of C-130Js will be significantly lower than that of the C-130s already in the Air Force's inventory.

But although the average E-model plane is about 30 years old, the fleet has flown an average of about 21,000 hours--well below the aircraft's planned 40,000-hour service life. Since the Air Force flies its C-130Es an average of 600 hours per year for active-duty forces and 375 hours to 450 hours per year for those flown by Guard and Reserve crews, it might be able to retain most of those planes until the latter part of the next decade.

A recent Air Force analysis has suggested that the costs of the ambitious upgrade might be higher than expected or that the program's schedule might be delayed. Furthermore, no one knows whether operation and support costs for the J version will be as low as the producer has advertised. Since Lockheed Martin has been developing the C-130s for its export customers, the Air Force might avoid technical and cost uncertainties associated with the program by waiting to modernize its forces until the development phase is complete.

DEF-14 RETIRE EXCESS KC-135 TANKERS

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	42	130	224	325	434	500	1,654
Outlays	34	110	200	297	403	476	1,519

The Air Force owns a large fleet of tanker aircraft to refuel transports, fighters, and bombers while they are airborne. Being able to do so is important for tactical air operations and for deploying forces by air from the United States to other parts of the world. By the end of 1996, U.S. tanker forces will consist of 472 KC-135 aircraft and 52 KC-10 aircraft (both figures reflect primary aircraft authorized--those planes available for operational use, excluding aircraft used for training).

During the past several years, most of the aircraft in the KC-135 fleet have been retrofitted with new CFM-56 engines that increase their fuel-carrying capacity. About two-thirds of the KC-135s have been or will be modernized with this engine by 1997. The remainder (designated as KC-135E aircraft) have been retrofitted with less efficient engines for the Air Force Reserve and Air National Guard.

This option would retire 100 E-version aircraft--those with the least efficient engine technology and the smallest capacity for fuel delivery--at a rate of 20 planes per year through 2001. That would still leave the military with more than 420 operational tanker aircraft (including KC-10s). Compared with the Administration's 1996 plan, this approach could save $42 million in 1997 and nearly $1.7 billion through 2002.

Historically, the tanker fleet has played an important role in the nuclear deterrence mission by supporting long-range strategic bombers. Today, however, most of the requirements for aerial refueling are derived from regional threats. The tanker fleet provides an "air bridge" for deploying conventional forces, thus reducing the amount of time it takes to place U.S. forces in distant theaters and decreasing the degree to which the United States must rely on foreign bases en route. Tankers can be used to refuel airlift aircraft, as was done to support the C-5 aircraft that carried heavy equipment to Somalia. To a limited extent, KC-135s can also transport cargo during peacetime; in the event of a major regional contingency, 26 would be used in a transport role. Once in theater, tanker aircraft support fighters and bombers, increasing their combat range and endurance. For example, about 300 tanker aircraft supported operations in the Persian Gulf War.

This option could provide enough tanker capacity to meet the requirements of future regional contingencies. The combination of planned KC-135 retirements and the changes proposed in this option would amount to a 16 percent reduction in the Air Force's total capacity for fuel delivery by 2001 compared with its current level. Relative to 1990 levels, those reductions in numbers of tankers are commensurate with the Administration's plans to reduce the number of attack and fighter aircraft by about 40 percent.

Retiring the older KC-135E aircraft would also avoid other problems. The KC-135E has a refurbished engine used formerly by Boeing 707 aircraft in commercial service. Although that engine has greater fuel efficiency than the KC-135's original engine, it gives the aircraft less capacity for fuel delivery and slightly higher operating and support costs than aircraft equipped with the more modern CFM-56 engine. In addition, the older engine does not comply with Federal Aviation Administration Stage III noise standards set for 2000. Since tankers often operate from airfields used for both military and

commercial aircraft, the Air Force would probably have to purchase "hush kits" or put new engines in its E-version planes in the near future.

Retiring KC-135E tankers, however, might leave fewer KC-10 aircraft available for airlift tasks. In addition to being an aerial refueling aircraft, the KC-10 can be used as an airlifter; it is especially efficient in delivering bulk cargo. The Air Force plans to dedicate just 15 of its 52 KC-10s to air refueling missions, leaving the remainder free primarily for cargo delivery. Thus, by retiring more of the Air Force's aircraft dedicated to refueling, this option may reduce the number of KC-10s that can be devoted to airlift missions.

Moreover, the Air Force may need to rely more heavily on aerial refueling if the United States loses access to foreign bases that support airlift missions en route. During the Gulf War, three bases (Zaragoza, Torrejon, and Rhein-Main) handled 61 percent of the airlift traffic. Of those bases, one is no longer available, and it is uncertain whether the United States will have the same degree of access to the others in the future. Opponents of this option might argue that a large tanker fleet makes the United States less dependent on obtaining overflight and landing rights.

This option might leave the United States unable to wage a conventional war and a major nuclear war involving strategic bombers at the same time. However, in light of the low probability of major nuclear war and the availability of other platforms for delivering nuclear weapons that do not depend on tankers, the loss of capability is unlikely to be a problem.

Perhaps more important, this option might also limit the United States' ability to achieve the Administration's stated goal of being able to prosecute two major regional conflicts that occur nearly simultaneously. In the Persian Gulf War, the military deployed 46 KC-10 and 262 KC-135 tankers. The refueling aircraft retained under this option would be sufficient for a future deployment of similar size and would also provide capability for a simultaneous, smaller conventional deployment in some other theater or for support of a small nuclear mission that involved bombers. But such a force might not permit the United States to fight two simultaneous wars on the scale of Operation Desert Storm.

DEF-15 MAKE THE ARMY RESPONSIBLE FOR CLOSE AIR SUPPORT

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	145	363	646	1,102	1,355	1,395	5,006
Outlays	118	310	559	953	1,232	1,332	4,505

Ground forces and air forces have typically operated in the same area and provided each other with mutual support. Forces on the ground have defended air bases from attack from both land forces and enemy aircraft. Conversely, air forces--in missions referred to as close air support and battlefield air interdiction--have attacked from the air targets that are beyond the reach of ground-based weapons. Those roles have become more complex, however, as ground-based weapons--helicopters and artillery in particular--have attained the ability to attack enemy assets at longer ranges. This option would relieve the Air Force of the responsibility for providing air support to the Army. A consequence of adopting this option is that the Army would have to rely on its own assets, such as attack helicopters and artillery, to attack targets beyond the range of direct-fire weapons such as tanks.

Even though the Air Force has had responsibility for providing close air support (CAS) to the Army for the past 50 years, several defense experts have expressed concerns and doubts about the willingness or ability of the Air Force to do so adequately. The CAS mission involves attacking hostile targets that are near friendly forces and requires close coordination with the Army. Although the Air Force has an airplane, the A-10, that is dedicated solely to the CAS mission, the service has periodically attempted to eliminate all of the A-10s from its force structure. The Air Force still has 158 A-10s, but that is far fewer than the 400 it fielded in 1988. Moreover, more than half of the remaining aircraft are in the reserve components.

The Air Force has traditionally allotted 25 percent of its fighter aircraft specifically to ground attack missions, which include close air support as well as battlefield air interdiction (BAI). Both those missions involve attacking enemy targets on the battlefield, but in contrast to close air support, battlefield air interdiction would be directed at targets far removed from friendly forces. As the number of A-10s has declined, the Air Force has assigned increasing numbers of its F-16s to those missions. By the end of 1996, three wings of F-16s, or about one-quarter of all of the Air Force's F-16s, could be designated for the CAS and BAI missions. Since the F-16s are multirole aircraft, however, they are not likely to be as well suited to the CAS mission as the A-10, which was designed specifically for it. In addition, the F-16s could be called on to perform other missions of more importance to the Air Force than CAS. All of these factors highlight the concerns Army commanders could have that Air Force aircraft might not be available when the Army needed them to provide air support.

Perhaps in response to these concerns, the Army has developed and fielded its own weapons capable of attacking ground targets beyond the reach of direct-fire weapons. The premier example of such a weapon is the attack helicopter, which can attack armored as well as soft targets and performed ably in Operation Desert Storm. In addition, the Army is developing fire-support weapons with increasingly long ranges and precision-guided munitions capable of attacking some of the targets previously accessible only by aircraft.

With the Army fielding hundreds of attack helicopters and increasingly sophisticated fire-support weapons, it may be possible to relieve the Air Force of the primary responsibility for providing CAS. That change would simplify operations since the Air Force would not have to coordinate its air strikes so

closely with the Army in order to avoid attacking friendly troops. Moreover, the Air Force could retire all of its A-10s and reduce the number of types of aircraft in its inventory, thereby realizing some budgetary savings. The Army could use its currently planned level of forces--attack helicopters and artillery--to attack targets that might today be assigned to Air Force aircraft.

This option would yield significant savings if it led to the elimination of all Air Force aircraft assigned to the close air support and battlefield air interdiction missions. Retiring all of the Air Force's A-10s and about one-quarter of its F-16s would reduce the size of the Air Force by about five wings. Such a reduction in force could save $145 million in 1997 and $5 billion over the next six years in operating costs compared with the Administration's 1996 plan. (CBO assumes that savings compared with the Administration's 1997 plan would be similar.)

Eliminating one-quarter of the Air Force's F-16s, however, could limit its ability to carry out its other missions. The F-16 is a multirole fighter capable of performing other tasks, such as air-to-air combat, besides providing air support to the Army. Cutting the F-16 fleet and the tactical Air Force by one-quarter would represent a major reduction in the Air Force's overall capability.

Shifting primary responsibility for close air support and battlefield air interdiction solely to the Army and eliminating Air Force assets assigned to those missions would also have other drawbacks. Having multiple means of attack is a distinct advantage for a commander because it forces the enemy to defend itself against multiple threats. Thus, if the United States can attack its enemies with fixed-wing aircraft, helicopters, and artillery all at once or in rapid succession, the defender's task becomes that much harder.

Another drawback to eliminating from the Air Force all aircraft designated for the CAS and BAI missions is the loss of the ability to react and deploy quickly that is inherent in aircraft. Aircraft are generally the first assets to arrive in theater, since additional time is needed to transport Army equipment, including helicopters, to trouble spots. With fewer aircraft in the Air Force inventory that are capable of CAS, delays may occur before significant assets arrive in theater to perform that mission. And a major lesson some observers have drawn from Operation Desert Storm is that air power can slow or even stop the advance of enemy ground forces. Sharply reducing the number of U.S. aircraft capable of providing close air support would eliminate many of the aircraft that contributed to an early victory in the Gulf War and helped to keep down the loss of U.S. lives.

DEF-16 FREEZE FUNDING FOR MILITARY SPACE PROGRAMS

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	312	469	825	513	395	241	2,755
Outlays	69	231	504	558	515	435	2,312

The United States conducts activities in space that are necessary for national security in the post-Cold War era. The Department of Defense's space program consists of launch vehicles, satellites, communications systems, navigation systems, related support facilities, and various space-related projects that provide assured, responsive support to military forces deployed worldwide. The CBO baseline for military space programs, including the budget requests for intelligence activities, averages about $14 billion to $15 billion for each of the next six years. Historically, DoD's request represents about one-half of all funds for federal space programs.

This option would freeze spending for military space programs at the 1996 appropriation level, allowing for increases only to keep up with the rate of inflation. Relative to the 1996 plan, this option could save $312 million in 1997 and $2.8 billion over the next six years. (Savings would be about the same relative to the Administration's new budget request because the Administration has not made many changes to the space program.)

During 1994 and 1995, the House Committee on Appropriations observed that no clearly defined national space policy existed to guide the investments and processes of military and civilian space programs. In the committee's view, the space program has been poorly coordinated, unresponsive to users' needs, inattentive to potential cost savings, and lacking in clearly defined requirements. The committee reaffirmed the need for a single integrated investment strategy to reduce costs and increase efficiencies. Although the committee asked the Secretary of Defense in 1994 to prepare a plan to meet those objectives, the department has not completed the report.

Reorganizing and streamlining defense space activities could result in significant savings by reducing the size of the workforce while improving the central oversight that would promote joint activities and coordination among various defense components. According to the General Accounting Office, for example, DoD could consolidate certain space education and training programs. Consolidating the services' satellite control network could also save money. The department could achieve additional savings by revising current practices governing the acquisition and operation of space systems. For example, placing greater priority on developing smaller satellites would allow the department to accelerate the move toward less expensive, smaller launch vehicles. DoD could also establish more reliable launch schedules by designing and implementing standardized interfaces and modular designs in new space systems. Closing space support facilities, including launchpads and range support installations that exceed requirements, could also yield savings.

If not properly managed, however, a freeze in funding for military space programs could risk the loss of important military capabilities needed to support the operations of military forces. Those programs play a critical role in various national security functions including military deployments and training exercises, intelligence reporting, and support during a crisis. Operation Desert Storm used space-based systems, such as the Defense Support Program and the Defense Satellite Communications System, that played vital roles in the coalition's success. Any reductions in spending for space programs should preserve the ability to provide the support necessary to conduct such critical missions. In particular, imposing proportional reductions on all space programs

below the currently planned level could delay some programs that deserve high priority. Specific proposals for appropriate priorities within constant funding levels should be identified in DoD's revised plans, which may also analyze the advantages and disadvantages of alternative programs, including their impact on the industrial base, their ability to meet requirements, and potential revisions to the military departments' roles and missions.

DEF-17 REDUCE THE NUMBER OF ARMY LIGHT DIVISIONS

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	424	1,415	2,568	3,596	4,096	4,218	16,316
Outlays	364	1,249	2,328	3,313	3,868	4,091	15,213

By the end of 1996, the active portion of the U.S. Army will consist of 10 divisions, six of which are generally regarded as "heavy"--that is, equipped with tanks and other armored vehicles. The six heavy divisions are primarily intended to be used against other armored forces. The other four divisions, referred to as "light" divisions, are useful against less heavily armored forces and were designed to be dispatched quickly and transported easily to trouble spots around the world. They include one airborne division, one air assault division, and two light infantry divisions (LIDs).

The utility of the light infantry divisions has been questioned in the Congress and elsewhere since their creation in the mid-1980s. The Reagan Administration justified the LIDs by emphasizing the need to respond to events anywhere in the world by rapidly dispatching U.S. forces. But recent history indicates that the United States may not need those divisions. Between 1945 and 1991, about 120 incidents--excluding major conflicts such as those in Korea, Vietnam, and Iraq--required commitment of U.S. ground forces. Of those, the Army was involved in about a third and, even then, generally not in very large numbers. Indeed, only 12 of those incidents required Army forces of division size or larger. One can argue that other units--including the Army's airborne and air assault forces and three Marine Corps divisions--also provide sufficient rapid response.

Other questions arise about the capability of the LIDs once they have been transported, presumably to a hostile location. With just 1,600 vehicles and 40 utility helicopters to transport the unit and all its equipment, a light infantry division has limited mobility. Thus, many of the more than 11,000 soldiers assigned to a light infantry division would have to move by foot. A LID also has limited firepower, particularly against an enemy with any kind of armored vehicles. Each division has only 88 long-range antiarmor missile launchers, 54 towed howitzers, and 40 helicopters armed with antitank missiles. The most numerous antiarmor weapon in the LID--162 Dragon medium-range antitank missiles--has a limited capability against modern tanks.

Perhaps the strongest statement about the utility of the LIDs in combat was made by the Department of Defense when it failed to use any light infantry forces during Operation Desert Storm. That conflict was initiated by a relatively unsophisticated foe and occurred halfway around the world with very little warning. The need to establish some military presence in theater very rapidly would seemingly have argued for the use of light infantry forces. Nevertheless, none of the LIDs were deployed. Another telling experience was that of the 10th Mountain Division in Somalia. That light infantry division's firepower and protection proved to be inadequate against even the unsophisticated and poorly equipped troops of a Somali warlord. As a result, parts of a heavy division were dispatched to Somalia to provide armored protection to U.S. forces there.

Questions could also be raised about the Army's need for both an airborne and an air assault division. The former is designed to be dropped by parachute into hostile territory when no seaport or airport is available for debarkation; the latter is designed to be deployed by helicopter to relatively remote locations, although the deployment must be staged from a protected area. The United States has not conducted a parachute assault involving an entire division since World War II. Drops including one brigade--about one-third of a division--were carried out in Korea and

Vietnam and in Panama in 1990. In Operation Desert Storm, portions of the 82nd Airborne were sent to the Middle East early in the operation, but they did not parachute in and, once reinforced by later-arriving heavy combat units, were assigned supporting roles and were not involved in any major battles. Additional paratroop-qualified units exist in the special-forces branch of the Army, and it is not obvious that the Army needs an entire division designed to be dropped by parachute.

This alternative would eliminate the equivalent of two of the remaining light divisions from the Army's active forces. Forces disbanded would include one of the remaining light infantry divisions and portions of the airborne and air assault divisions. To permit an orderly drawdown, the divisions would be eliminated gradually over the six-year period. The alternative would retain one light infantry division and one airborne division consisting of two air assault brigades and one airborne brigade. Compared with the Administration's 1996 plan, this alternative would save $424 million in 1997 and more than $16 billion over the next six years. (CBO assumes that savings compared with the Administration's 1997 plan would be similar.)

Despite these savings and the shortcomings of the light infantry divisions, eliminating more of them would reduce U.S. capability in certain situations. For example, LIDs might be useful during combat in urban areas where armored vehicles could not operate easily. They might also be useful for defending areas such as airports or seaports if the enemy did not have armored capability. Finally, in a recent demonstration of the utility of light divisions, contingents from the 10th Mountain LID were instrumental in operations in Haiti. A proposal to eliminate all but one of the LIDs might also encounter political opposition because it would mean closing at least one military facility that has been activated and refurbished in recent years.

DEF-18 ELIMINATE FOUR GUARD DIVISIONS

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	150	526	987	1,515	1,837	1,892	6,907
Outlays	132	475	916	1,427	1,768	1,859	6,576

The Army National Guard is manned mostly by part-time soldiers and makes up more than half of the Army's combat forces. At the end of fiscal year 1996, about 373,000 people will be members of the Guard, which operates units in all 50 states. Guard units are under the authority of state governors during peacetime, and state governments contribute to the Guard's operating expenses, particularly when units perform state missions. When mobilized for combat, Guard units come under the active Army's chain of command.

Eight full divisions and 15 independent brigades will make up the Guard's ground combat units under the Administration's plan. Additional units provide combat support (such as artillery) to the Guard and combat service support (such as transportation) to combat units in the active Army. The Army also relies on the skills of 230,000 largely part-time soldiers in the Army Reserve, most of whom perform support services.

Guard units were an important element of the combat forces the United States expected to deploy in a war with the former Warsaw Pact. Operating at roughly a quarter of the cost of a comparable active division, guard units provided a cost-effective way to reach the large force levels that would have been required in a land war against the massive forces of the former Soviet Union. According to the Army's planning factors, the United States expected to be able to deploy certain Guard brigades at the same time as their active-duty counterparts and to deploy the full divisions, which would require more time to prepare for combat, in a second wave that would have been sent to Europe about a month later.

The Army now contends, however, that those Guard units would require considerably longer to prepare for deployment than it previously estimated. According to revised estimates by the active Army, full divisions would take up to a year to become sufficiently ready to go to war. Other analysts maintain that those divisions could be ready much more quickly--perhaps within 72 to 120 days of mobilization--possibly in time to contribute to a short war. Brigades might take less time, perhaps two to three months or so.

The Army's revised estimates--combined with a decrease in overall force requirements for the smaller wars that now make up the Department of Defense's planning scenarios--have raised questions about whether the Guard, and specifically its divisions, have a clear mission in a post-Cold War world. Indeed, at least one report, *Directions for Defense: Report of the Commission on Roles and Missions of the Armed Forces,* prepared for the Secretary of Defense, has suggested that the Administration's deployment plans no longer include the full Guard divisions. That assertion would seem consistent with the relative brevity of currently envisioned wars and with the longer mobilization times now assumed for Guard divisions. Some defense experts believe that the funds that pay to operate Guard divisions might be better spent training and equipping units in the active Army that play a role in the current scenarios. The Bottom-Up Review, an articulation of the Clinton Administration's defense strategy, suggests that the Administration intended that the Guard divisions would provide a strategic reserve in the event of conflict and, some defense experts argue, thus retain an important mission in the post-Cold War world.

This alternative would eliminate four of the Army Guard divisions and their support forces in the Guard and active Army, but would keep four Guard divisions, the 15 independent brigades, and the forces in the Army Reserve. Since Army Guard divisions have less-immediate missions in current plans, the four divisions would be phased out quickly. Such an action would save almost $1.9 billion a year in operating costs once it was fully implemented. By eliminating a Guard division each year starting in 1997 and continuing until 2000, DoD might save almost $7 billion over the 1997-2002 period. Savings directly associated with eliminating the operating costs of the four Guard divisions would total $2.7 billion over that period. The remainder of the savings would come from reductions in the infrastructure of the active Army and the Guard that supported those divisions. (CBO assumes that savings from the Administration's 1997 plan would be the same.)

This option would also enable DoD to reduce its investment costs, since it would be equipping a smaller force. The magnitude of the additional savings is difficult to estimate, however, because the Guard receives much of its equipment as hand-me-downs from the active Army. Although some equipment is bought directly for the Guard--for example, portions of the currently planned procurement of SINCGARS radio equipment--DoD provides no detailed plans for such purchases. CBO's estimate therefore excludes equipment savings.

Eliminating Guard divisions presents a number of problems, however. The Administration plans to reduce the Army Guard and Reserve to about 575,000 reservists by 1999. That plan was agreed to in the 1993 "Offsite Agreement," an arduous negotiation involving active and reserve Army personnel as well as personnel from several associations that deal with issues affecting the Army and the Army reserve. (The term "reserve" refers to the Army's reserve component, including personnel in the Guard and the Reserve.) Some of those participants would probably feel that further reductions to reserve personnel violated the terms of that agreement. Furthermore, proponents of the Guard would argue that giving it a larger share of DoD's missions and forces would be a more cost-effective way to restructure the Army's combat forces, because operating costs are much lower for Guard units than for their active-duty counterparts. (Guard units might still be cost-effective even if more money was spent to better equip and train them so that they might be more easily integrated with active units and be more ready for combat.) Also, some analysts believe that preserving forces in the Guard provides insurance in the event of further reductions in the active Army. Perhaps the greatest obstacle to substantially reducing Guard forces is that the Guard is a popular and powerful organization. As a result, efforts to reduce its structure will probably be highly contentious.

The Guard argues that eliminating its divisions would harm its ability to provide assistance in domestic crises, such as natural disasters and civil disturbances. Although the remaining Guard units could help in such instances, some states would probably find themselves with little or no Guard presence. Of course, states could always choose to fully fund some of their Guard units to retain the emergency services. Indeed, Guard personnel who were trained to render emergency services in domestic crises might perform better than those who were trained primarily for combat. In any event, the Guard has never been asked to provide a large number of personnel for state missions, though large percentages of individual states' Guard personnel have been called up during recent domestic crises such as Hurricane Andrew and the Los Angeles riots in 1992. A recent Congressional Research Service report, *Army Reserve Components: Current Issues for Congress*, suggests that interstate agreements might be a way to expand the number of Guard personnel available to state governors in a domestic crisis.

The Administration will probably restructure the Army's reserve component. The planned restructuring would probably not result in cuts as large as those discussed above, however; indeed, it might result more in a shift of Army reserve personnel from combat missions to support missions. Nonetheless, giving the Army's reserve forces a larger support role might provide a more compelling justification for keeping the units rather than eliminating them as this option proposes.

DEF-19 CANCEL THE ARMY'S TANK UPGRADE PROGRAM AND LAY AWAY PRODUCTION FACILITIES

Savings from the 1996 Plan	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	464	566	664	664	670	619	3,647
Outlays	32	237	442	551	614	628	2,504

The shrinking of the U.S. military, coupled with the disappearance of a long-time foe and the unprecedented peacetime investment in modern weapons that occurred in the 1980s, has sharply reduced the need for new weapons. In particular, the Army now has enough of the latest type of tank, the Abrams, to equip the forces it plans to have for the foreseeable future, and so it has no plans to buy new tanks for at least the next 15 years.

The Army has proposed instead to upgrade about 1,000 M1s--the first model of the Abrams tank--to a later configuration designated as the M1A2. That program is intended, in part, to increase the capability of some of the tanks that the Army will have in the field for the next 20 years and in part to keep producers of tanks and tank parts in business, pending the need for a tank to replace the Abrams.

During the Bush Administration, the Army advocated closing the tank production line and putting it in mothballs. In March 1992, then Chairman of the Joint Chiefs of Staff General Colin Powell testified before the Congress that the Army's current tank was the best in the world. That testimony disputes the Army's current rationale for upgrading tanks, which is based on the need for better ones. Indeed, although the M1A2 is 20 percent more capable than the M1 model--as measured by one scoring system developed for the Defense Department--converting 1,000 M1 tanks to the M1A2 model would increase the total capability of the 7,880 Abrams tanks in the Army's inventory by only 3 percent. That slight increase in capability would come at a high price--a total of about $3.9 billion over the next six years.

This alternative would cancel the Army's upgrade program but would retain some of the major components of the tank industrial base in a mothballed status. By preserving the facilities, the United States would retain the capability to produce tanks again when the next generation was needed to replace the Abrams or in the event of a crisis that required more Abrams tanks. The costs of mothballing the government-owned facilities that manufacture tanks and components would slightly offset the savings resulting from terminating the upgrade program. Even after taking those costs into account, however, savings from adopting this alternative would still amount to $464 million in 1997 compared with the 1996 plan and would total $3.6 billion over six years. (Savings compared with the Administration's 1997 plan would be similar.)

Closing the tank line would also have some disadvantages. Without an upgrade program, the U.S. inventory would include less than 400 of the most capable M1A2 tanks. As regional powers acquire improved tanks, the absence of M1A2s might erode the U.S. advantage in a war, even though the M1A1 remains a highly capable tank. Closing the tank line would also end U.S. capability to produce large numbers of new tanks quickly. The Army estimates that producing new M1A2 tanks at high rates from a mothballed line could take six years--about one year more than to produce large numbers of new tanks from a line involved in modifying tanks.

Perhaps the most important drawback of this option is that some businesses that currently manufacture tank components might close and so be unavailable to produce tanks in the event of a crisis. A related concern is the potential loss of workers whose skills are unique to tank manufacture and who would have to be retrained in order to perform up to government standards. Even though Defense Department

officials have asserted that the United States currently has enough capable tanks to meet any foreseeable contingency and that there would be enough time in the event of a major crisis to restart the tank line, closing the tank line carries some risks. Those risks have to be weighed against the hundreds of millions of dollars that would need to be spent annually to provide insurance against them.

DEF-20 CANCEL THE ARMY'S COMANCHE HELICOPTER PROGRAM

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	113	107	201	222	324	434	1,400
Outlays	144	187	194	220	285	384	1,414

The Army fields about 6,000 helicopters, some of which are approaching the end of their 20-year useful service life or have exceeded it. About 2,000 of the helicopters--the OH-58 Kiowa scout helicopters and the AH-1 Cobra attack helicopters--are Vietnam-era aircraft that the Army plans to replace with the RAH-66 Comanche helicopter. The Comanche will fill both the reconnaissance and the attack roles that those two helicopters now perform.

The Comanche program, when it was conceived in 1983, was intended to develop one aircraft that, in two different configurations, could replace not only the Vietnam-era scout and attack helicopters described above but also the UH-1 utility helicopters of the same vintage. The Army originally planned to buy more than 5,000 Comanches of various configurations. The utility version was dropped in 1988, however, because the program had become too costly. Since then, the Comanche program has included only the attack and scout version, and the quantity has been reduced further, from a planned purchase of more than 2,000 aircraft to just under 1,300. The helicopter is still in the development stage, which will continue at least through 2004. As recently as 1992, the Army had planned to start buying Comanches in 1996, but it has since delayed the start of production until 2005.

These changes in the objective and size of the program have caused the cost of each Comanche helicopter--expressed in 1997 dollars--to more than double since the program began, from $11 million in 1985 to $26 million based on the Army's 1996 estimate. Furthermore, the Comanche has become more expensive to acquire than the Army's current generation of attack helicopter, the AH-64 Apache, which is bigger and heavier than the Comanche. That cost increase is significant, particularly in a helicopter whose development was originally justified on the basis of its being inexpensive to purchase, operate, and maintain. Indeed, the Comanche's high cost calls into question the prudence of pursuing this as-yet-undeveloped aircraft instead of continuing to buy existing helicopters such as the Apache or later models of the Kiowa.

Some analysts have questioned the wisdom of continuing the Comanche program. A General Accounting Office (GAO) report published in 1992 noted not only the increase in the cost of buying the Comanche but also the potential for maintenance costs to increase to three times the original estimates. Those factors, plus the risk of additional cost increases as technical issues are resolved, caused GAO to question the Army's underlying rationale for the Comanche program. In addition, the Comanche, which was conceived at the height of the Cold War, will no longer need to counter threats of the same scale or sophistication as those it was designed to thwart. Indeed, the Comanche is now so similar in capability to the Apache--the aircraft it is supposedly designed to complement--that whether it has a unique role to play in Army aviation is unclear. Without a mission that existing Army helicopters cannot perform, it is hard to justify the continued development of an aircraft that is more expensive to acquire than existing helicopters.

Based on these various concerns, this alternative would provide other means for filling the Comanche's role, at reduced cost. It would cancel the RAH-66 program, thereby saving $2.6 billion over the next six years. Some added costs, however, would be associated with buying more helicopters of other types. The Army has already purchased enough Apaches to

fulfill the attack role assigned to 13 of its 18 divisions. During Operation Desert Storm, Apaches performed their missions without scout helicopters, and this alternative accordingly would provide no replacements for the aging Kiowas currently assigned that role in those divisions. The Army, however, needs to replace the aging Cobras assigned to the attack aviation units of the remaining divisions. Armed scout helicopters, known as Kiowa Warriors, were used effectively in the Persian Gulf and could replace the Cobras still in service. The Congress has supported purchasing those aircraft in the past, and the Army has bought a limited number (382). This alternative would buy 24 armed scout helicopters each year, leading to a total procurement of 519 by the end of 2005. After taking into account the cost of buying those helicopters, net savings compared with the 1996 plan would be $113 million in 1997 and would total $1.4 billion over the 1997-2002 period. (The savings compared with the Administration's plan for 1997 would be similar.)

The primary disadvantage of adopting this alternative would be the loss of the new aviation technology incorporated in the Comanche. Some analysts would argue that the threats the Comanche is likely to face would not demand the very sophisticated stealth, avionics, and aeronautic technologies slated for the new helicopter, but others would support the program as a way to maintain the U.S. lead in helicopter technology. Some of the Comanche's new technologies are already being incorporated into current U.S. helicopters such as the Apache. Abandoning the RAH-66 program, however, would mean that the Army would have to rely on helicopters designed in the 1960s and 1970s for years to come.

DEF-21 PREPOSITION ARMY FORCES ON LAND RATHER THAN AFLOAT

Savings from the 1996 Plan	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	480	670	670	-40	100	110	1,990
Outlays	30	190	310	390	400	320	1,640

In 1992, the Department of Defense's Mobility Requirements Study recommended that the Army preposition enough equipment on board ships so that it could quickly deploy a heavy brigade to regions as far away as Korea or Southwest Asia. That recommendation was based on the realization that in a world with fewer U.S. bases abroad, delivering large numbers of Army units by air or ship from the continental United States would take a long time. DoD officials believe that stopping an enemy attack in its early stages would require fewer forces than would pushing an enemy out of territory that it succeeded in occupying. Under that line of reasoning, by prepositioning equipment on board ships in the Indian Ocean and sending troops to meet up with it, the Army could halt enemy forces early in a conflict and thus ultimately fight a major regional contingency with fewer forces.

Today, the Army Prepositioned Afloat (APA) program keeps enough tanks and other heavy equipment on board seven ships in Diego Garcia--an island in the Indian Ocean--for a mechanized or armored brigade or an armored cavalry regiment. When augmented with five ships that are positioned in Guam, Saipan, and Diego Garcia, the APA can also provide a three-division contingency corps with enough supplies for 30 days of combat operations. The APA force also includes two ships that hold cranes and other equipment to help off-load cargo at ports that are ill equipped. As of 1996, the Navy has purchased 13 large, medium-speed roll-on/roll-off (LMSR) ships out of 19 that it plans to procure. Ultimately, eight of those LMSRs will contain equipment for the Army's heavy brigade and its logistical support under the Administration's plan. For the near term, however, the Army leases seven smaller roll-on/roll-off ships from the Navy's Ready Reserve Force to house its brigade.

This option would place the Army's equipment for a heavy brigade on land in Southwest Asia and would cancel the purchase of the remaining six LMSR vessels since they would no longer be needed to preposition the equipment afloat. CBO estimates that net of the costs to construct buildings for heavy forces in Southwest Asia and maintain that equipment, the option would save $480 million in 1997 and almost $2 billion over the 1997-2002 period.

Critics of this option would argue that it would not allow the United States to deploy adequate numbers of forces quickly enough to a major regional contingency in South Korea. Current plans are to deploy the Army's heavy brigade afloat to either of the areas in the Defense Department's major planning scenarios (Southwest Asia or the Korean Peninsula) within two to three weeks. If that brigade was prepositioned on land in Southwest Asia, it could not be deployed as readily to a Korean conflict. Instead, the Army would need to send forces by ship from the continental United States or from U.S. bases abroad, which might take three to four weeks. Nor could parts of the heavy brigade be deployed as rapidly to smaller contingencies in other regions.

Some defense analysts might also argue that even if the Army's heavy brigade was prepositioned on land, the Navy would need to procure more LMSRs because the Army would still need additional heavy forces to halt an attack by North Korea. Although commercial sealift ships could help deliver equipment as they did during the Persian Gulf War, a dedicated fleet of military sealift ships would ensure that

additional forces could deploy immediately from the United States at the first sign of conflict; that is, some military analysts argue that commercial ships might not be available as quickly as military ones.

Supporters of this option would counter that the Army brigade that is currently prepositioned afloat may not be critical to the defense of South Korea. The Army already bases two brigades of its 2nd Infantry Division in South Korea, and it is planning to supplement those forces by prepositioning equipment for a third brigade on the peninsula in 1997. That combination of forces may be adequate to defend against the early stages of an attack by North Korea.

Even if additional forces were needed, the military's existing fleet of sealift ships plus chartered commercial vessels might be sufficient to deliver the equipment. During the first three months of the Persian Gulf War, for example, the Department of Defense relied on commercially chartered vessels (most of which were under foreign flag) to deliver 30 percent of all combat and support equipment. According to a Center for Naval Analyses study of Gulf War deployments, commercially chartered ships tended to arrive more quickly at U.S. ports for loading than dedicated ships that were activated from the Ready Reserve Force.

Moreover, placing the Army's equipment for a heavy brigade on land in Southwest Asia could reduce the amount of time needed to halt an enemy attack in that region. Given adequate airlift, Army personnel could be flown to meet up with their equipment in about one week, rather than the two to three weeks required to deploy forces from Diego Garcia, off-load their cargo at friendly ports, and transport it over land. If the enemy mined ports or targeted them with weapons of mass destruction, moving that equipment to the battlefront could take even longer.

DEF-22 CUT SPENDING FOR DUAL-USE TECHNOLOGY PROGRAMS TO HISTORICAL LEVELS

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	285	353	326	484	646	702	2,796
Outlays	124	268	318	388	524	633	2,255

NOTE: The Administration, in its 1997 budget request, has revised its plan for these programs. Appendix A shows savings against the 1997 plan.

In recent years, the Congress and the Administration have expanded funding for research and development (R&D) on dual-use technologies--those that have both civil and military applications. One program that was financed with part of that increase was the Technology Reinvestment Project. TRP provided support to consortia that developed or disseminated dual-use technologies; it was administered by the Defense Advanced Research Projects Agency (DARPA) in cooperation with the three military departments and five other federal agencies. In most cases, recipients of TRP awards matched their federal support dollar for dollar.

Several other dual-use programs have also received considerable funding increases over the past several years, including R&D in high-performance computing, materials and electronics processing, and electronics modules. Those programs are administered by DARPA, whose technical managers are given considerable independence in selecting technologies and managing projects. Organizations that receive R&D awards from DARPA are not necessarily obligated to share project costs, although some do.

For 1996, the Congress eliminated funding for new TRP awards but appropriated $195 million to continue projects initiated before October 1, 1995. The Congress also appropriated about $1.2 billion for other dual-use programs. For 1997, the Administration has proposed replacing TRP with the Dual-Use Applications Program (DUAP). That initiative was designed to address criticisms of TRP by focusing only on technologies that are potentially useful to the military and by making all of its awards through a competitive selection process--that is, avoiding special earmarks. The Administration requested $250 million for DUAP in 1997 and continued funding for that and other dual-use programs over the next six years.

This option would eliminate funding for TRP and DUAP projects and limit funding for other dual-use initiatives to $1.2 billion, an amount that is consistent with appropriation levels from 1992. Compared with the 1996 plan, this option would save $285 million in 1997 and nearly $2.8 billion through 2002. Compared with the Administration's 1997 request, savings under this option would be much lower because proposed levels of spending for most of the dual-use programs have been reduced to about $1.3 billion annually. Those savings could reach $123 million in 1997 and total $700 million over the next six years.

Advocates of greater funding for dual-use technologies contend that those programs ultimately will help lower the cost of defense equipment. Although military R&D has spawned numerous commercial applications, today some civil products outpace their defense counterparts and are less expensive, particularly those in the field of microelectronics. By incorporating widely available components from the commercial sector, some defense equipment could be made more capable while keeping costs reasonable. Programs such as DARPA's efforts in electronics processing may help to adapt commercial technologies for military use.

Initiatives such as DUAP may also improve the integration of the defense industrial base into civil sectors of the U.S. economy. Historically, military

and civil production have been treated as two distinct sectors because of onerous cost-accounting requirements and detailed specifications for military products, among other factors. But as U.S. military spending has declined, integrating those sectors in order to meet future military needs has become more important. Some analysts fear that, otherwise, only a few companies would remain in the defense business and retain the capability to produce sophisticated military equipment. That could become a problem if threats to national security emerged that would need advanced technology to counter them. Some advocates also believe that dual-use programs can bolster economic growth in certain industries, especially high-technology ones.

Critics of direct funding for dual-use R&D argue that other policy changes can encourage the integration of civil and military efforts more effectively. Adopting commercial standards in place of military specifications, for example, may allow weapons producers to incorporate civil components on a more widespread basis than, say, a DARPA-sponsored study in which commercial technologies are customized for military use. Dual-use programs that tailor civil technologies to defense specifications can leave too little in common with the commercial marketplace, thereby defeating one of the key purposes of dual-use items: to benefit from economies of scale in production. Ultimately, dual-use programs may not be sufficient to sustain domestic suppliers of high-technology goods for military equipment. And such programs also cannot control whether companies that develop technology with their help share those innovations with foreign firms, even though such sharing may undermine the objectives of the program.

Moreover, these dual-use programs sponsor a type of R&D for which the grounds for government funding are less clear. Most economists believe that federal support for basic research is justified because the private sector will underinvest in research of that type. More contentious, however, is the degree to which the government should support applied R&D, the type funded by most dual-use programs. As projects move from underlying scientific knowledge closer to products and processes, the commercial benefits of that R&D are likely to become more apparent. Applied research projects could take numerous paths, and it is difficult to select a few projects from among several promising applications and then evaluate critically the role of federal support. Some analysts therefore contend that the private sector--with its vested interests in identifying commercial potential--is better suited to promote applied R&D projects. Furthermore, if supported with federal funds, R&D programs can become entrenched politically and difficult to discontinue.

DEF-23 ASSIGN A WARTIME FUNCTION TO MILITARY PERSONNEL IN TRAINING OR TRANSIT

Savings from the 1996 Plan	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	644	3,153	5,094	5,236	5,381	5,520	25,028
Outlays	525	2,817	4,820	5,144	5,319	5,467	24,091

At any time, about 65,000 of the Department of Defense's active-duty military personnel are either in transit between assignments or undergoing individual follow-on training to learn more military skills or further their professional development. The services do not assign those individuals a wartime responsibility within a unit even though they have usable military skills.

During the Cold War, when the United States was preparing to fight a long, conventional war against the Soviet Union, DoD's wartime planning assumption was that most of those individuals would complete their training and then fill vacancies caused by wartime losses or help to form additional units as the force was expanded. But with the end of the Cold War, DoD now prepares to fight two brief, major regional contingencies. In a short war, the individuals en route to new assignments or undergoing follow-on or professional development training could be used to fill existing deploying units immediately or to substitute for personnel who deploy to the combat theater.

This option would direct the military services to assign those individuals a wartime responsibility in their previous unit, in the unit to which they were traveling, or in another unit that would require their skills. (Only personnel who had already completed their basic and initial skills training, which would give them usable military skills, or who were en route to new assignments would be assigned a wartime role.) If DoD adopted this policy, it would need about 65,000 fewer military personnel for a savings of $5 billion annually by 1999. To carry out this policy, the services would staff certain units below current levels on the assumption that personnel would become available if war erupted.

Some personnel analysts would suggest that this policy could jeopardize military readiness; mobilizing and integrating these individuals into units could take some time because they would have to move from training or other assignments. In addition, the services would prefer not to disrupt the training pipeline because that could make it more difficult to fill positions once the war was over. During the contingency, the training base itself would also temporarily be underused because fewer students would be training there.

Although assigning wartime responsibilities in this way would reduce staffing below current levels, those levels have remained fairly high in recent years. Moreover, since the services are not likely to expand the size of forces--in contrast to planning assumptions during the Cold War--the risk of not fully staffing units would be lower. The services could also distribute reductions in staffing levels to areas that would pose the least risk to meeting wartime contingencies. The services acknowledge that in a major contingency, they might compress training and pull individuals out of courses if they were needed. In fact, the Air Force already simulates such scenarios. During Operation Desert Storm, for example, the Army also required that individuals postpone scheduled moves if their skills were required for the war. Finally, this policy change would reduce costs by using all trained personnel who would be available in wartime. Although personnel in training or en route to new assignments would experience disruptions, so would all personnel facing deployments to meet a contingency.

DEF-24 RESTRUCTURE MILITARY HOUSING ALLOWANCES

Savings from the 1996 Plan	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	32	75	119	132	136	139	633
Outlays	30	73	116	131	135	139	624

In 1996, the military services will spend $5.7 billion on housing allowances for service members stationed in the United States who do not live in government-supplied housing. The allowance consists of two parts: the basic allowance for quarters (BAQ) and the variable housing allowance (VHA). The amount of each component depends on the member's pay grade and whether he or she has dependents. In addition, the VHA amount varies among different parts of the country, based on periodic surveys of members' housing expenditures. The BAQ is intended to cover 65 percent of the nationwide median housing expenditure of personnel in each grade and dependency status, although it currently covers only about 60 percent of the median. The VHA pays the difference between the median housing cost in each area and 80 percent of the national median. Thus, a typical member is currently expected to cover about 20 percent of the national median cost out of pocket, except in areas where housing costs are so low that the BAQ alone leaves a smaller uncovered cost. A separate overseas housing allowance, which serves a similar function to the VHA, applies to members stationed outside the United States.

This option would make two changes in the way housing allowances are calculated. First, it would combine the separate basic and variable allowances--BAQ and VHA in the United States, and BAQ and overseas housing allowances elsewhere--into a single housing allowance. Second, it would change the way in which the allowance is calculated in the United States, basing the allowance on estimates of housing prices rather than on members' housing expenditures. The option would set allowance rates across the country to equalize the well-being of members facing different prices. (A similar change might be possible for the overseas allowance but was not examined as part of this option.)

The current system for setting VHA rates has been criticized for not meeting one of its principal goals. As stated by the Seventh Quadrennial Review of Military Compensation in 1992, "a service member should be unaffected by the housing price variations between locations." However, because people respond to differing housing prices by adjusting their consumption of housing services--more or fewer rooms, closer to or farther from work--differences in service members' expenditures between locations may not measure differences in area housing prices or in well-being. A service member sent from an area of higher housing prices to one of lower prices can reduce his or her spending on housing and enjoy better housing. Conversely, when moving from a low-price area to a high-price area, he or she will pay more for less housing. The current system adjusts for the changes in expenditures but not for the changes in benefits. Thus, it tends to undercompensate people stationed in high-cost areas and overcompensate people in low-cost areas, compared with the situation of people facing average housing prices.

Although seemingly involving only a technical adjustment, this option would achieve substantial overall savings because the savings from reduced housing allowances in areas with low housing prices would more than make up for the costs of increased allowances in areas with high prices. The option would save $32 million in 1997 and $633 million over the 1997-2002 period. The savings assume that new allowance rates--either higher or lower--would

apply only to people newly assigned to an area; service members would continue to collect housing allowances at the old rates until they were reassigned.

Two major objections might be raised to the change proposed by this option. First, although the change would achieve greater equity among service members assigned to different areas of the country, it would amount to a reduction in the average level of military compensation. Thus, it could cause some members to leave the military who would otherwise have remained. That effect would be partially offset, however, to the extent that members recognized that they would benefit, on average, from the reduced geographic variation in living standards that the change would achieve.

The second objection is that estimating housing prices accurately enough for the purpose of calculating allowances could prove difficult. Available data on housing prices cover geographic areas that do not always coincide exactly with the specific locations in which service members choose to live. Data might be available for a particular city, for example, but not for the corner of that city where a military base happened to be located. Further refining such data could add to the costs of administering the allowance program. The savings estimates above do not reflect any increase in administrative costs. In developing the estimates, CBO used an inexpensive procedure, suggested in a RAND study, that derives prices indirectly from the data on members' housing expenditures that are already being collected. Whether that procedure would prove to be a practical alternative to using independent price data would require further study.

DEF-25 REDUCE THE BASIC ALLOWANCE FOR SUBSISTENCE OF ENLISTED PERSONNEL

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	95	220	355	500	645	700	2,515
Outlays	90	215	350	490	640	695	2,480

Although originally intended to defray a portion of the cost of subsistence for service members not receiving rations in kind, since 1974 the basic allowance for subsistence (BAS) has generally been raised in lockstep with military basic pay. In part as a result, the money that a typical enlisted service member receiving BAS spends on the food he or she consumes at home is probably less than the amount of his or her allowance (which is higher than what officers receive). The U.S. Department of Agriculture regularly estimates the cost of food at home for various families and individuals; the enlisted allowance is greater than the cost for a typical male adult in a family of four under all but the most liberal of the USDA food plans. Thus, in addition to its intended role as compensation for the lack of government-provided meals, BAS has served as an income supplement for enlisted members who receive it.

The role of the basic allowance for subsistence in supplementing income is particularly important for very junior married personnel, whose seemingly low pay levels have received special attention in the wake of reports that many military families may be receiving food stamps. For a married person in the lowest enlisted pay grade, BAS averages 13.3 percent of total compensation (including the tax advantage that accrues because subsistence and housing allowances are not subject to federal income tax), compared with only about 8.4 percent for all married enlisted personnel. To some extent, however, the concerns about low pay levels are misplaced: even the most junior married enlisted person receives total compensation that exceeds the total family income of nearly 20 percent of U.S. families and half of all young families (those headed by a person under age 25). The use of food stamps apparently derives less from low total compensation than from the way the military's quarters allowance is administered: married personnel living in government quarters are not paid a cash allowance and so, having a lower cash income than their counterparts living off-base, are more likely to qualify for food stamps. According to the Department of Defense, 40 percent of the military families receiving food stamps live on-base, although overall only about 20 percent of the families of members in the three lowest enlisted pay grades live on-base.

The harmful effects of a too-generous subsistence allowance became apparent during Operation Desert Shield/Desert Storm. Many military families were suddenly, and unexpectedly, deprived of the income supplement when their service members were deployed to the Persian Gulf (and lost BAS because they received government rations). Although families' food costs may indeed have fallen, their income fell by even more. Many perceived that as an unfair burden to place on families already hurt by the members' sudden departure. To address that problem in the subsequent deployment of troops to Haiti, the Defense Department adopted a stopgap policy that resulted in the services' paying BAS to all enlisted personnel in Haiti, regardless of whether they had been entitled to it before the deployment, as well as feeding the deployed troops.

This option would reduce BAS for enlisted personnel to a level equivalent to that for officers (currently $149.67 per month), phased in over five years. The most common form of enlisted BAS, which is given to people on leave or authorized to mess separately (for example, single personnel authorized to live off-base and to receive a quarters allowance, and married personnel accompanied by their dependents), would eventually be reduced by 31 percent, to $4.92 per day at 1996 pay rates compared with the current

$7.15. Compared with BAS costs under current law and based on the Administration's 1996 plan for reducing military personnel levels, the option would save about $95 million in 1997 and a total of $2.5 billion over the 1997-2002 period. Additional savings might accrue if the change in BAS rates prompted DoD to abandon the interim policy of paying BAS to all troops in certain deployments. Some of the savings might be offset if a targeted pay raise or some other measure was used to counter specific problems arising from the option (see below).

Linking the BAS rate for enlisted personnel to that for officers reflects an essentially arbitrary choice. Alternatively, the rate could be based on one of the four USDA food plans. Food costs for a male adult age 20 to 50 in a family of four under the low-cost plan (second lowest of the four) are slightly lower than the current allowance for officers, and under the moderate-cost plan are about $31 per month higher. The thrifty plan (lowest cost) is used in determining food stamp payments; costs under the liberal plan (highest cost) are roughly the same as the current enlisted BAS level.

The option would have two major advantages in addition to the obvious one of reducing defense expenditures. First, as suggested above, it would reduce or eliminate the problem of families of deployed service members experiencing a decline in their living standard (albeit at the cost of reducing their disposable income at other times). Because the allowance would no longer include an income supplement, the income lost when the member deployed would be roughly offset by the reduction in the family's total food costs. Second, the option would eliminate an inequity in the current system that favors married personnel and others who receive a subsistence allowance over people who must eat in government mess halls, many of whom are single junior personnel. The former receive a payment that probably exceeds their actual food costs; the latter apparently incur out-of-pocket costs on the occasions when they do not eat in the mess halls--about 44 percent of all meals. To a small extent, the cut might discourage some married people from entering the military and some single personnel already in the military from marrying. Some observers might see that as an advantage and others as a disadvantage.

The option achieves its savings by cutting the total compensation of a majority of enlisted personnel. That approach might be undesirable for two reasons. First, it would probably reduce personnel retention and could make recruiting more difficult--both traditional areas of concern. Second, the most junior personnel eligible for BAS would suffer the largest percentage reduction in compensation because the dollar amount of the allowance is the same for all enlisted pay grades.

Although the income of junior enlisted personnel may not be as low as is sometimes thought, that group would definitely be hardest hit by this option. The BAS cut would reduce the total compensation of very junior married personnel by about 4 percent--twice as great a percentage as for senior noncommissioned officers. Offsetting the reduction for junior personnel through an increase in basic pay for the three lowest enlisted pay grades would cost about $300 million per year, based on 1996 pay rates. That possible offset is not reflected in the savings shown in the table.

DEF-26 RESTRUCTURE OFFICER ACCESSION PROGRAMS

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	140	235	330	435	435	450	2,025
Outlays	105	200	300	400	425	440	1,870

The military services have drawn on several management tools to reduce the size of the officer corps. They have encouraged voluntary separations through specific actions such as tightening criteria for promotion and liberalizing early-out procedures. They have reduced the number of senior officers by selective early retirement, and they can make further cuts through reductions in force if necessary. Finally, the military services have reduced the number of new officers (accessions) who enter the force each year, consistent with the projected smaller force.

This option would restructure officer accession programs beyond the changes the Department of Defense has already made. Overall accession levels would not be cut below the level planned by the department, but more officers would be drawn from lower-cost commissioning programs--Reserve Officer Training Corps (ROTC) and Officers Candidate School/Officer Training School (OCS/OTS)--and fewer from the more costly service academies. In addition, a ceiling would be placed on the per capita amount that could be spent on each recipient of a ROTC scholarship. Further, the option would cut Junior ROTC programs and eliminate the preparatory schools operated by the service academies. Relative to the Administration's 1996 plan, savings would be about $140 million in 1997 and a total of $2 billion through 2002.

Of that total, $1 billion would come from cutting class size at the three service academies. At present, each academy graduates about 1,000 second lieutenants or ensigns a year. This option would reduce that number to 625 by cutting the size of the entering class for the three academies from a total of 3,000 to only 1,875. Estimated savings from that action reflect only the costs that would change in the near term, such as faculty and cadet pay and operating expenses. Those savings would be offset by the additional costs of about $85 million over the six years that would be needed to procure officers from OCS and ROTC to replace those from the academies. In the longer term, savings also might accrue from changes in the academies' physical plant.

Additional savings under this option would stem from changes in the structure of ROTC programs. In 1995, DoD spent $280 million for ROTC scholarships. (DoD covers other costs of education, but this option deals only with tuition.) About 40 percent of ROTC students now attend private institutions. The average cost per student in 1995 for tuition at four-year private institutions, based on data from the Department of Education, was $11,500 a year, more than four times the average cost of $2,700 at public universities. The option would cap ROTC scholarships at the $2,700 level consistent with average tuition at public institutions. Under a cap, DoD might choose to reduce the number of programs at high-cost institutions, reallocating resources to lower-cost schools in order to maximize the number of officers trained. Alternatively, the department might elect to pay only a fraction of total tuition at high-cost institutions, requiring the student to make up the difference. Students currently enrolled would be allowed to complete their education without financial penalty.

Furthermore, this option would cut Junior ROTC programs by about 25 percent. Junior ROTC provides introductory military training and uniforms to students in secondary school, at an overall cost in 1996 of $160 million. Recent Congressional action significantly expanded Junior ROTC in an effort to place more programs in the inner cities. The reduction called for in this option would restrict that

expansion by 50 percent. DoD could retain programs in urban areas or elsewhere. Savings would be $34 million in 1997 and $221 million over six years.

Finally, the option would close the preparatory schools operated by each service academy. Those schools accept students who cannot meet the stringent admission criteria of the academies and gives them a year of additional training and schooling so that they can gain entry to an academy. Savings in 1997 would be about $20 million and would total about $120 million through 2002.

Supporters of the military academies have contended that those programs are needed to produce future service leaders. That argument has not persuaded the Congress, but past attempts to mandate cuts at the academies have been only partly successful; class size has declined modestly, but academy graduates now account for a larger share of officer accessions than at any time since at least 1980. There is little evidence for the contention that the academies have already reduced their class size to the minimum efficient level, as supporters have claimed in arguing that further cuts would not produce savings.

Opponents of a dollar ceiling on ROTC scholarships might argue that the quality of a graduate from a private institution is higher than that of a graduate from a public institution. Setting a cap--and limiting the number of accessions from private institutions--thus might reduce the overall quality of the officer corps. However, the national security benefits of paying the higher tuition at private schools are unclear at best. Supporters of the public educational system might claim that the quality of education at public schools equals that provided at private ones.

Proponents of Junior ROTC include many Congressional supporters who contend that it provides discipline and reinforces positive values for teenage youth, particularly in inner-city schools. Nonetheless, the program's contribution to national security is difficult to measure, and if its benefits lie in the behavioral changes it encourages, it arguably should be funded in competition with other social programs targeted toward such populations.

Similarly, supporters of the service academies' preparatory schools claim that those schools are needed to provide an opportunity for students from less fortunate circumstances to enter the military academies. Those schools also provide an avenue for enlisted personnel to enter the academies. Opponents argue that the schools are used to enable the academies to recruit athletes and minorities who cannot otherwise qualify for admission, and that at an average total cost of about $40,000 per student they are more expensive than most other secondary education or than OCS/OTS programs, the primary avenue of commissioning for enlisted personnel.

DEF-27 RESTRUCTURE THE BONUS PROGRAM FOR PILOTS

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	2	6	11	17	25	38	99
Outlays	2	6	11	16	25	37	97

Since 1989, the Air Force has projected an overall shortage of pilots, in part because of the departure of pilots to the commercial sector. In order to address the shortage, the Air Force has undertaken several initiatives including paying its pilots bonuses. Under the Aviator Continuation Pay (ACP) bonus program, which the Congress authorized in 1989, pilots who qualify can receive up to $12,000 a year for agreeing to remain on active duty through their 14th year of service. At present, the Air Force pays all pilots of fixed-wing aircraft the same bonus regardless of which weapon systems (fighters, bombers, tankers, strategic airlift, theater airlift, or trainers) they fly.

The Air Force has made good use of the ACP program. However, in part because of the military drawdown and the subsequent reduced need for pilots, some major weapon systems (namely, tankers and theater airlift) will probably have a surplus of pilots. Under this option, the bonus would be made available only to pilots of major weapon systems for which shortages are projected. Moreover, bonus payments would vary according to the degree of shortage. Relative to the Administration's 1996 plan, this option would save $2 million in 1997 and a total of $99 million through 2002.

Precedents exist for targeting bonuses in this manner. For example, the Navy uses this approach in providing bonuses to its pilots. Furthermore, several types of military pay are targeted in accordance with the degree of personnel shortage, including special and incentive pay for physicians and recruiting and reenlistment bonuses for enlisted personnel.

The Air Force historically has opposed targeting bonuses in that way, arguing that doing so would adversely affect morale, possibly exacerbate retention problems, and ultimately increase pilot shortages. Moreover, the Air Force maintains that pilots would object to a bonus system that resulted in internal inequities, since they all endure similar hardships during peacetime and face the same substantial risk in war. However, whether all pilots share that view is arguable. Combat pilots, for instance, face different risks and deployment patterns than transport or tanker pilots.

DEF-28 RESTRUCTURE THE BONUS PROGRAM FOR NUCLEAR OFFICERS

Savings from the 1996 Plan	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	9	13	18	20	21	21	102
Outlays	8	13	17	20	21	21	102

One of the pressing personnel issues facing the Navy is meeting its numerical requirements for officers with nuclear training, a challenge that has intensified as the Navy downsizes its force. Moreover, the shortage of nuclear-trained officers, who serve on shore and at sea on submarines and surface ships, is projected to continue in the near future.

One of the major tools with which the Navy is addressing the situation is the Nuclear Officer Incentive Pay (NOIP) program. That program provides a continuation pay (COPAY) bonus of $10,000 a year for nuclear officers who sign a contract to remain in the Navy for three to five years and a smaller career annual incentive bonus (AIB) of $7,200 a year for officers who reenlist for a year without a contract. In addition, the program offers an accession bonus of $6,000 to new officers who choose the nuclear field.

Under this option, the COPAY and AIB portions of the NOIP program would be terminated, saving $9 million in 1997 and $102 million over the next six years. Current Navy requirements call for about 5,500 nuclear-qualified officers. But many of the requirements involve positions unrelated to the nuclear field--as teachers at the Naval War College, the Naval Postgraduate School, or the Naval Academy. Only about one-third of the total positions the Navy sets aside for nuclear submarine officers actually require nuclear training, and only one-fourth of those for nuclear surface officers do so. If fewer officers with nuclear training were willing to stay in the Navy as a result of their cut in compensation, those positions not requiring nuclear-qualified officers would be filled by officers who were not nuclear-qualified.

Proponents of the option argue that even without the bonus, a sufficient number of nuclear-qualified officers would stay to fill the limited number of positions that actually require nuclear expertise. Opponents would counter that even though many positions currently held for nuclear-qualified officers do not actually require the nuclear qualification, it is important that those officers have the same opportunities for advancing their career as their counterparts in other Navy fields. Opponents believe that eliminating the bonus would adversely affect morale and eventually lead to an unsustainable decline in retention.

DEF-29 RESTRUCTURE RESERVE COMPENSATION

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	245	365	555	765	970	1,240	4,140
Outlays	230	350	530	725	925	1,175	3,935

In 1996, nearly 900,000 people will serve part time in the reserves, with personnel costs of roughly $5.4 billion. Those reservists typically participate in 48 training drills per year, which usually involve one weekend of reserve duty each month, and also serve on active duty for two weeks each year. They are compensated with pay and allowances for time spent training as well as with credit toward military retirement benefits.

This alternative would make three changes to the reserve compensation system that would save about $245 million in federal budget authority in 1997 and a total of more than $4.1 billion through 2002. Annual savings would continue to grow in the years beyond 2002. In addition to realizing savings, this alternative would aim to equalize active and reserve service for pay purposes, to treat different categories of reservists more equitably, and to improve efficiency in personnel management.

Treat Reserve Service Like Active Service for Pay Purposes. Part-time reservists, like their active-duty counterparts, receive periodic pay increases in three basic ways: in annual across-the-board raises intended to keep military pay competitive with civilian pay, through promotion to higher pay grades, and through longevity increases based on years of military service. Under the current pay table, longevity increases can contribute as much as or more than promotion raises to total career earnings, particularly for officers. On average, longevity increases raise basic pay by about 5 percent and generally come every two years.

A reservist receives the same credit toward longevity raises from a year of part-time work as does an active-duty person serving full time. Typically, however, reservists serve only about 60 days a year (including, for many personnel, days for which they are not paid). A person with 10 years of part-time reserve service, for example, is paid at the same rate as a counterpart in the same grade with 10 years of full-time service, even though the reservist will have served far fewer days. In calculating credit for retired pay, however, the reserve compensation system recognizes that difference. The reservist receives four points for each weekend (two drill periods each day, worth one point each), one point for each active-duty day, and an additional 15 points each year just for remaining affiliated. A total of 360 points earns the same credit toward retired pay as does one year of service for an active-duty member.

This option would put part-time service on the same point basis for determining raises based on longevity that is used for determining retired pay. In general, one "year of service" for pay purposes would require about five years of part-time duty--longer for people who met only the minimum service requirements and less for those who put in substantial additional time. Thus, on average, reservists would tend to receive longevity increases at intervals of roughly 10 years instead of the current two years. Past service, however, would continue to be counted as under the current system; that is, past service would be grandfathered. Compared with the system under current law, this alternative would save about $40 million in 1997 and $2.8 billion over the 1997-2002 period. Annual savings would continue to grow in later years as more of the total accumulated reserve service time was covered by the new system.

Eliminate Dual Compensation for Reservists Employed by the Federal Government. More than 120,000 reservists are employed in civilian jobs in

the federal government. Those people benefit from the government's strong support of reserve training and may experience fewer conflicts with employers than do reservists who work in the private sector. In addition, reservists employed by the government receive dual compensation during their two weeks of annual training--both their government and reserve pay--without having to use vacation time or annual leave. Although a few of the larger private-sector employers mirror that government pay practice, dual compensation is not the general rule for reservists who are employed outside the federal government.

This alternative would eliminate dual compensation for reservists who are given time off from their federal jobs to carry out their active-duty commitment. Instead, they would receive only the higher of the two payments during the service period. Savings would be about $200 million in each of the six years. This particular proposal has been included in the National Performance Review initiatives.

Eliminate Reserve Retirement. The United States is the only country that offers retirement benefits to its part-time military personnel. Those benefits parallel the ones provided for active-duty service and have remained largely unchanged since their enactment in 1948. Reservists are entitled to retired pay at age 60 after 20 years of active or reserve service, but at least the last eight years must have been spent in the reserves. The amount of retired pay is based on length of service and the average highest three years of pay. Payments to reserve retirees in 1994 totaled $2 billion. In 1997, the Department of Defense will set aside an amount equal to 9.6 percent of reservists' basic pay, or roughly $320 million, to pay for their future retirement benefits.

This option would terminate reserve retirement for people entering the reserve components after the end of fiscal year 1996. The federal government would not realize savings for many years because the actual payments would not occur until those new reservists reached age 60. Officers would be affected most because they receive about 80 percent of the total amount of retirement benefits paid to reservists, even though they constitute only 15 percent of reservists.

Although these three changes offer potential advantages, they could also raise problems. The changes would be imposed during a period of considerable turmoil caused by the reduction in the number of military personnel, including reserve personnel. Broad changes in the compensation system may be easier to effect once the drawdown is complete.

More important, these changes would result in lower paychecks for reservists and would eliminate their retirement benefits, which could lead to problems in retention and possibly in recruiting. Retention already is lower among reservists who are at the early stages of their reserve career than among their active-duty counterparts. These changes, however, would tend to have their greatest effects on career retention. In the long run, lower career retention would result in a younger, more junior reserve force, which might even be seen as an advantage. In addition, personnel who remained would probably see their opportunities for promotion improve, offsetting some of the effect of less frequent raises based on longevity and the lack of retirement benefits.

The military could target bonuses toward those reservists most in demand, making payments at various points during reservists' careers to retain those with needed skills. Bonuses could also be used to recruit new reservists into occupational areas that are difficult to fill. Added costs for bonuses, however, are not reflected in the savings noted above.

The military could also use these bonuses to phase in the retirement changes more quickly, by offering reservists a choice between continuing under reserve retirement or potentially receiving bonus payments. Reservists choosing bonus payments would then forgo future retirement benefits.

DEF-30 DENY UNEMPLOYMENT COMPENSATION TO SERVICE MEMBERS WHO VOLUNTARILY LEAVE MILITARY SERVICE

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	210	200	205	205	215	220	1,255
Outlays	210	200	205	205	215	220	1,255

Many military personnel who leave active-duty service are eligible for unemployment benefits. Their payment amounts are calculated in the same way as those of civilian personnel who qualify for unemployment benefits. However, eligibility of former military personnel differs from that of recipients in the civilian labor force in one important respect. Former military personnel can apply for and receive unemployment benefits even if they voluntarily leave military service, but civilian recipients must have lost their job involuntarily.

The majority of personnel who leave military service do so voluntarily. For example, many choose not to reenlist following completion of their term of service. Others, who have completed a minimum of 20 years of service, opt for voluntary retirement. Still others may choose to leave military service in return for cash payments under the voluntary separation incentive and special separation benefits programs enacted in 1991. A much smaller group is separated involuntarily for reasons related to job or promotion performance or, in recent years, because of the drawdown of military forces.

Under this option, former military personnel would be subject to the same rules as other members of the civilian labor force; that is, only personnel who left service involuntarily would be eligible to receive payments. Eliminating payments to people who left service voluntarily would reduce the number of recipients by at least two-thirds, resulting in savings of about $210 million annually. Because the Department of Defense ultimately reimburses the Department of Labor for the cost of unemployment payments to former service members, those savings would occur in the defense budget.

The unemployment insurance program was established with the intent of aiding people who lost their job involuntarily. Subjecting military personnel to the same rules as the rest of the workforce regarding unemployment compensation thus could be seen as a more equitable use of an existing entitlement program. But if military service is considered to be fundamentally different from other types of employment, one could argue that voluntary separation from service is not comparable with voluntary termination of civilian employment and therefore should not be subject to the same restrictions on eligibility for unemployment compensation.

DEF-31 ADOPT HMO STAFFING PATTERNS IN MILITARY MEDICAL FACILITIES

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	20	61	104	129	133	136	583
Outlays	19	59	102	127	132	132	571

In December 1993, the Department of Defense announced its plans to reform the military health care system by establishing a program of managed care nationwide, referred to as Tricare. Ensuring that people who are eligible for health care from the military have access to high-quality health care benefits and improving the efficiency of the military health care system are two of the major goals of the Tricare program. DoD has already introduced a new approach to delivering and financing health care in the military to encourage coordination among the Army, Navy, and Air Force and to provide them with strong fiscal incentives to control costs. When fully implemented, Tricare will also introduce several managed care strategies, which many civilian plans have adopted, to improve the cost-effectiveness of the system.

This option, building on the incentives under Tricare, would require DoD to adopt staffing patterns at the military medical facilities based on the standards used by civilian health maintenance organizations. HMOs are generally accepted as a cost-effective way to deliver care to a defined group of enrollees by controlling their use of health care and delivering services as economically as possible.

Putting HMO staffing patterns into effect could lead to substantial savings for DoD by reducing the overall number of physicians the military employs. Civilian HMO staffing standards suggest that DoD would need 8,060 physicians. That number is based on the assumption that about 5.1 million beneficiaries seek care from military medical facilities worldwide; the number is adjusted upward for differences in age and sex of military beneficiaries and civilian HMO enrollees. Recognizing other key differences between military and civilian HMOs, such as training and the services' readiness requirements, the number of physicians needed would rise to 12,070. At the end of fiscal year 1997, however, DoD plans to have about 13,320 physicians--or about 1,250 more than required for the military in this option. By having fewer physicians, DoD could lower health care costs by about $20 million in 1997 and more than $580 million over six years, in comparison with the Administration's 1996 plan. These estimated savings are in addition to those resulting from the drawdown already planned for uniformed and civilian physicians. The estimates also assume that HMO staffing standards would be phased in over three years.

Even though adopting HMO staffing patterns would be consistent with the department's move toward managed care for the military, this option has some drawbacks. HMO staffing patterns assume significantly lower levels of health care use by enrollees than is true for the military beneficiaries who currently use the military's medical facilities. Therefore, reducing the number of military physicians would decrease the access of beneficiaries to military medical care.

The higher rates of health care use by military beneficiaries compared with HMO rates, however, underscore the differences in practice patterns between military physicians and those who work in civilian HMOs. Unless military physicians changed how they practice medicine, reducing the number of physicians could lead to rationing or poorer service. That said, phasing the HMO staffing patterns in over three years, as this option assumes, might mitigate many of the potentially adverse effects of those cutbacks on beneficiaries. That phase-in period would allow physicians some time to understand the variations in clinical practice patterns between HMOs and the military and to modify their behavior accor-

dingly. DoD could support those efforts by trying to understand clinical variations among the services as well as differences in practice patterns among physicians.

A more serious problem that relates directly to the issue of care is the possibility that the number of eligible military beneficiaries electing to use the military health care system might grow. With more beneficiaries, the problems of excess demand, rationing, and declines in the quality of service would be greater than assumed here, because the number of physicians assumed in this option might not be sufficient to meet HMO staffing patterns for the military.

In view of these uncertainties, this option makes the conservative assumption that beneficiaries receive all of their health care at military medical facilities, though currently they actually receive about 20 percent of their care from civilian providers paid by DoD. Indeed, accounting for the care that beneficiaries receive from civilian providers could lower the number of physicians needed to meet civilian HMO staffing standards by as much as 20 percent--or from the 8,060 assumed here to 6,450.

DEF-32 REVISE COST SHARING FOR MILITARY HEALTH CARE BENEFITS

Savings from the 1996 Plan	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	202	203	204	204	205	205	1,223
Outlays	175	197	201	201	202	202	1,178

About 8.2 million people are eligible to use the military health care system. That total includes all men and women on active duty, their spouses and children, and retired military personnel and their dependents and survivors. Yet only about 6.4 million of them actually use the military's system of care. Many of those who are eligible choose instead to rely on other insurance coverage. Eligible people do not have to enroll or otherwise commit themselves to use the military system. Instead, they can elect to use military care on a case-by-case basis, thus creating major cost and management uncertainties for military providers.

Beneficiaries who choose to use the military's health care system receive most of their care in the military's hospitals and clinics (referred to as the direct care system). Other care is given by civilian providers who are reimbursed by a traditional fee-for-service insurance program known as the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS). Of all the military beneficiaries admitted to hospitals in 1993, 75 percent were admitted through the direct care system and only 25 percent through CHAMPUS. Care furnished in military facilities is virtually free to the beneficiary, whereas CHAMPUS users bear higher out-of-pocket costs for the care they receive, although they are not required to pay an insurance premium.

The Department of Defense, however, is now implementing a plan, known as Tricare, for reforming the current system of military health care. DoD plans to make Tricare available to all military beneficiaries nationwide by the summer of 1997. Under that plan, beneficiaries can choose among three options for health benefits: Tricare Prime, a plan modeled after private-sector health maintenance organizations (HMOs); Tricare Standard, the standard CHAMPUS benefit plan; or Tricare Extra, a preferred provider option that beneficiaries participating in Tricare Standard are allowed to use on a case-by-case basis. Only Tricare Prime requires beneficiaries to enroll. Active-duty personnel and their dependents do not pay an annual enrollment fee, but retirees pay $230 for single and $460 for family coverage. (Beneficiaries who are 65 years of age or older are not allowed to enroll in Tricare Prime under provisions governing CHAMPUS eligibility.)

Tricare makes many changes to the military health care system, but those changes may not be sufficient to remedy the inefficiencies that have beset DoD's management and delivery of health care. In an effort to improve the Tricare program, this option would make two modifications to the military health care benefit. The first would require all beneficiaries, except those who are 65 years of age or older, to enroll in either Tricare Prime or Tricare Standard as a precondition for using the military health care system. Annual enrollment fees for Tricare Standard would be modeled after the fees established for Tricare Prime. Active-duty personnel and their dependents would pay no fee, but retirees under the age of 65 would pay an annual fee of $115 for single and $230 for family coverage.

The second modification would equalize the cost-sharing requirements for outpatient care for all beneficiaries regardless of whether that care was received in a military or civilian setting. New cost-sharing requirements for direct military health care would be modeled after the civilian cost-sharing requirements for Tricare Prime.

Savings under this option could amount to about $200 million in 1997 and about $1.2 billion through 2002 compared with the Administration's 1996 plan. Those savings would stem from the revenue generated from enrollment fees, increased charges, and the reductions in patterns of use by beneficiaries in response to higher cost sharing. Some of those savings, however, would be offset by the cost of modifying existing automated information systems to collect the higher fees, which has not been included.

All three Tricare plans would require that beneficiaries seek care through the direct care system before going to a civilian provider. Beneficiaries using the direct care system would continue to pay very little out of pocket. The costs for hospital care would not change: most beneficiaries would pay between $4.75 and $9.70 per day, and retired enlisted personnel would pay nothing. Moreover, outpatient visits and prescriptions would continue to be free for all beneficiaries.

Beneficiaries using civilian providers would generally continue to pay more out of pocket for their care under Tricare than if they used the direct care system. How much more would depend on the beneficiary's choice of plan. Enrollees in Tricare Prime would pay the least out of pocket for the care that they obtained from a civilian network provider: most beneficiaries would pay about $11 per day for hospital care and between $6 and $12 for outpatient care. The cost-sharing requirements for Standard and Extra users would generally be higher.

Aside from raising revenue, this option would yield many other benefits. An efficiently managed system would require DoD to be able to identify the population for whom health care was provided. Tricare begins to build a better foundation for DoD by requiring people who choose Tricare Prime to enroll. But DoD would still face a challenge in planning for people who did not enroll. Military providers need to be able to plan for the health care needs of a defined population to develop per capita budgets and build cost-effective health care delivery networks. Those strategies can be put into effect only if all beneficiaries commit themselves either to use a military plan or to rely on nonmilitary sources of care. The universal enrollment requirement in this option would accomplish that. Charging more for direct care would also help curb excessive use of services in military facilities by creating the same incentives for beneficaries who used the military treatment facilities as for those who used civilian providers. Finally, this option would eliminate the inherent inequity of providing more generous health care benefits to people who live near a military hospital or clinic.

This option also has drawbacks. Because medical care is a key part of military compensation, military families might view increased charges as an erosion of benefits. That could be of particular concern during a major drawdown of forces, which has already created considerable uncertainty among military families. Recruitment and especially retention could suffer, although enrollment in Tricare would continue to be free for active-duty personnel and their dependents, in contrast to the premiums typically required for enrolling in other medical plans offered to civilian employees in either the federal government or the private sector. Nor should rising charges necessarily harm health, because evidence shows that people at ages and income levels typical of military beneficiaries seek needed care even when they share costs.

DEF-33 DOWNSIZE THE MILITARY MEDICAL SYSTEM

Savings from the 1996 Plan	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	270	1,100	2,015	2,505	2,720	2,640	11,250
Outlays	125	620	1,330	1,865	2,210	2,315	8,465

The Department of Defense operates an extensive military medical system that is the chief source of health care for about 6.4 million people, including 1.6 million uniformed personnel. The need for the system stems primarily from its mission to care for military personnel in wartime. In peacetime, military medical personnel train for their wartime mission and also provide care for active-duty personnel, their dependents, and retirees and their families.

During the Cold War, wartime military medical requirements were based largely on the scenario of an all-out conventional war in Europe. The expected high casualty and injury rates generated demands for far more hospital beds and physicians' services than military budgets could afford. The military built large medical systems incorporating some 30,000 hospital beds in the United States and requiring the services of 13,000 active-duty physicians.

This option would restructure the military health care system based on the reduction in wartime medical requirements that has occurred since the Cold War ended. Although the size of the system has been reduced slightly in response, wartime requirements have plummeted so sharply that the military medical establishment in the United States now has more than twice the capacity needed to meet the projected wartime demand for medical care. Substantial reductions in the number of facilities--and personnel--in the military health care system may therefore be possible.

According to a study for the Department of Defense conducted by RAND, for example, the military could eliminate all but 11 of today's 99 hospitals in the United States. That would reduce the wartime capacity of the system in the United States, as measured by the number of hospital beds, by more than two-thirds--from over 18,000 beds to about 5,500 beds. In doing so, DoD's health care system would be able to meet about 60 percent of the total wartime requirement for 9,000 beds, a significantly higher percentage than it ever met during the Cold War. As DoD has traditionally planned, the Department of Veterans Affairs and the civilian sector would provide the additional beds during wartime.

To date, DoD has no plans to make such deep reductions in the size of its medical establishment. Military medical officials argue that military medical facilities and the care those facilities provide in peacetime are essential to train physicians and ensure medical readiness for wartime. In addition, they claim that they must maintain a large enough establishment to attract, recruit, and retain medical personnel. In principle, however, DoD could separate its responsibility to provide beneficiaries with access to medical care from its direct provision of peacetime health care in military facilities. Indeed, given that the department reimburses beneficiaries for care received from civilian providers through the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), it already makes that separation to a degree.

Downsizing the military's medical system to such an extent would obviously have a major impact on training and preparing for wartime. Such an effort would require DoD to strengthen its affiliation with the civilian sector to provide wartime training for military medical personnel, meet some of the requirements for active-duty personnel, and ensure an adequate supply of wartime beds. Developing those closer ties with the civilian sector might be worth the effort, since practicing medicine in the civilian sector

would probably afford military medical personnel more experience in treating the diseases and injuries that they might be required to deal with in wartime than would treating mostly civilian patients in military medical facilities. (See Congressional Budget Office, *Restructuring Military Medical Care*, July 1995, for a fuller discussion of this subject.)

This option would also have a significant impact on the way that DoD provides health care to the millions of people who rely on the military system. A downsized medical establishment would drastically limit the ability of DoD to provide care directly to its beneficiaries, including military personnel. Active-duty personnel would receive their health care in both military and civilian settings; other beneficiaries--dependents of active-duty personnel and retirees and their families--would have to depend entirely on the civilian sector.

Carrying out such an aggressive restructuring of the military medical system would offer substantial savings. Net savings would be $270 million in 1997 and more than $11 billion over six years. Those net savings reflect both the costs avoided by downsizing the military health care system and the costs of providing an alternative source of health care coverage for non-active-duty beneficiaries.

Costs Avoided by Downsizing. Under one definition of wartime readiness, DoD could reduce its net annual costs by about $770 million in 1997 and more than $39 billion through 2002. That estimate of savings accounts for the eventual elimination of CHAMPUS, the provision of health care to active-duty personnel, and the costs of closing down the military medical system; it does not, however, reflect the costs to the federal government of cleaning up hospital sites, because DoD would have to pay those costs anyway.

Costs of Health Care. Any serious effort to restructure the military health care system would probably consider the costs of providing an alternative source of health care coverage for non-active-duty beneficiaries. For that reason, this option assumes for illustrative purposes that DoD would offer non-active-duty beneficiaries the opportunity to enroll voluntarily in the Federal Employees Health Benefits (FEHB) program. As an employer, DoD would pay the government's share of the premiums for the plans that beneficiaries selected, modeled on the premium-sharing arrangements between the government and nonpostal employees. Another key assumption of this option is that DoD would ensure that all of its beneficiaries over the age of 65 had full coverage under Medicare.

Assuming gradual implementation of this option, the total cost to the government of providing an alternative source of health care to non-active-duty beneficiaries would be about $500 million in 1997, growing to almost $28 billion over the next six years. Based on that estimate, the government's cost would be substantially less than the savings it could realize by downsizing and restructuring the military health care system.

This option might be opposed for several reasons. Beneficiary groups might object because enrolling in a plan offered under the FEHB program would cost them substantially more on average than what they pay out of pocket for care in the military health care system today. Nevertheless, many FEHB plans would offer improved coverage to military beneficiaries and so might be worth the higher out-of-pocket costs.

This option would also require DoD and the Congress to proceed unambiguously with separating peacetime care from wartime readiness. Military medical officials strongly oppose downsizing the military medical system on the grounds that such actions would jeopardize medical readiness. But in fact, this option would make wartime medical readiness the primary objective of DoD's medical planning. In the past, DoD has had difficulty balancing the wartime mission with peacetime care. DoD has stated that it has not always been able to serve its wartime mission well given its tendency to emphasize the delivery of peacetime care at the expense of wartime preparedness. This option would help to address that problem by redefining the responsibilities of the department.

DEF-34 CLOSE THE UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES

Savings from the 1996 Plan	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	21	35	52	94	97	100	399
Outlays	17	31	47	84	93	98	369

Historically, the Department of Defense has faced shortages in medical personnel, particularly physicians. To alleviate that situation, DoD has developed various programs to provide a supply of those personnel. One such program is the Health Professionals Scholarship Program (HPSP), which pays tuition and a stipend to medical students and to students in other health-related programs in return for a military service obligation. Another is the Uniformed Services University of the Health Sciences (USUHS), a medical school operated by DoD.

The Congress created the university in 1972 to train physicians committed to long-term military careers. At a total cost of about $100 million in 1995, the school provides a full education for its participants, including a stipend to cover room, board, and books. Based on figures from 1995, USUHS is the most expensive source of military physicians at about $615,000 per person. By comparison, scholarships cost about $125,000; other sources, such as the Financial Assistance Program (FAP), cost about $60,000. Even after adjusting for the lengthier service commitment required of physicians trained at USUHS, the cost of training them is still higher than that of training physicians from other sources.

USUHS has met only a small fraction of DoD's need for new physicians--less than 12 percent in 1994, for example. Scholarships provided over 80 percent, and the remaining 8 percent came from other sources, including volunteers.

This option assumes that the class of students admitted in August 1996 would be USUHS's last; the institution would close at the end of fiscal year 2000 after those students had graduated. Other programs for obtaining physicians would be expanded to offset the loss of physicians trained at USUHS. CBO's estimate of the Administration's 1996 plan, as modified by Congressional action, assumes continuation of the USUHS program at current levels. Compared with that plan, net savings to the defense budget would be $21 million in 1997 and $399 million over six years. Those savings include reductions in military and civilian personnel assigned to the university, which would be in addition to planned drawdowns. They also reflect the added cost of obtaining physicians from other sources, such as the HPSP and FAP.

Congressional support for this option would be hard-won. For the past two years, the Administration has proposed closing the university. Each year, however, the Congress has directed DoD to keep USUHS open. In its reasons for doing so, the Congress has cited many of the arguments of the university's supporters. Those supporters claim, for example, that USUHS physicians are better trained for the special needs of the services because of the university's focus on the study of military medicine and preparation of military medical officers. In addition, some of the higher costs of USUHS are repaid, in effect, because USUHS-trained physicians have a longer service commitment than physicians from other sources. For example, graduates of USUHS must pay back seven years of active duty, whereas scholarship recipients must pay back only about one year of active duty for each year of health professional training. The longer tenure of USUHS graduates may enhance stability in the medical corps and reduce demands on the other sources of physicians.

Supporters of USUHS also argue that direct cost comparisons between it and other sources of physi-

cians may be unfair to the university because of indirect subsidies that the federal government provides to medical schools, which in effect raise the true governmental cost of physicians from sources other than USUHS. Nonetheless, taking those subsidies into account would lead to the dubious conclusion that closing USUHS would increase the amount that the federal government spends on indirect subsidies to medical schools.

DEF-35 CLOSE AND REALIGN ADDITIONAL MILITARY BASES

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	0	-373	-865	-137	695	1,059	379
Outlays	0	-116	-403	-424	-34	455	-521

NOTE: Savings for this option do not include the costs for environmental cleanup since the Department of Defense is obligated to incur such costs regardless of whether it operates or closes bases.

Starting in 1988, the Department of Defense sought to achieve savings by closing military bases. DoD concluded that the reduction in military forces justified cutting back the number of bases. To elevate that process beyond parochial concerns, the Congress set up the Commission on Base Realignment and Closure (BRAC) in October 1988 (BRAC I) and subsequently chartered additional commissions to meet in 1991, 1993, and 1995 (BRAC II, III, and IV). Those commissions have directed the closure and realignment of hundreds of military installations in the United States, Puerto Rico, and Guam. According to current DoD estimates, BRAC actions will yield 20-year savings with a net present value of about $57 billion. The department estimates that when all four BRAC rounds are completed, it will save about $6 billion a year in operating costs.

This option would authorize another round of base closures and realignments that, when implemented, could save an additional $379 million during the 1997-2002 period. Between 1997 and 2006, this option could save about $6.1 billion in budget authority and about $4.3 billion in outlays as the department begins to realize steady-state savings. The estimates of the near-term costs and long-term savings for this option are based on DoD's experience and current projections for the four earlier rounds of base closings.

Closing and realigning additional military bases is consistent with DoD's overall drawdown of forces. By several measures, the reductions in military forces significantly exceed the planned cutback in the number of bases. When the services have carried out current plans to reduce the force structure, for example, the Army will have cut the number of active and reserve divisions by 36 percent, the Navy will have reduced the number of battle force ships by 37 percent, and the Air Force will have lowered the number of active and reserve tactical fighter wings by 44 percent. By the end of 1999, when DoD will have completed implementing the Bottom-Up Review and virtually all of the past BRAC closure and realignment actions that it began in 1990, military and civilian end strength will have fallen by about 968,000 positions--a reduction of about 31 percent from personnel levels in 1990. By one measure, reductions in the base structure have not been as extensive as those in the force structure: DoD estimates that when all rounds of closures and realignments have been completed, the replacement value of the base structure (the cost of replacing all buildings, pavements, and utilities) will have decreased by only about 21 percent.

Some analysts believe that DoD can further reduce the number of military bases. In March 1995, the Secretary of Defense indicated that he would recommend that BRAC authority be extended to permit another round of base closures because the services had indicated the potential for further cuts. In the *Department of Defense Base Closure and Realignment Report* of March 1995, the department stated that opportunities existed for further cutbacks and consolidations of depot maintenance facilities, defense laboratories, test and evaluation installations, medical facilities, and training bases for helicopter pilots.

Others believe that the BRAC cuts have gone far enough in matching the planned reductions to the force structure, most of which have already been carried out. The base structure, they believe, should retain enough excess capacity to accommodate emerging risks to national security that could require a surge in the number of military forces.

Closing military bases can produce substantial savings. But experience indicates that the actual savings from another round of cuts could be lower than expected. Projected net savings for BRAC II, for example, have declined from the initial estimate of $3.0 billion to about $0.8 billion at present. Higher environmental cleanup costs and lower revenues from the sale of property explain most of the change in DoD's estimates.

Furthermore, closing bases requires a substantial up-front investment that may be difficult to justify in a constrained budget environment. Up-front costs for this option could amount to about $1.4 billion in budget authority during the 1997-2000 period, when most of such costs would occur. For example, DoD estimates that the costs of military construction activities to implement BRAC I and BRAC II amounted to about $2.8 billion.

Closing and realigning additional bases could also make better use of federal property. Former military bases are transferred either to other federal agencies or to local redevelopment authorities for economic development or for nonprofit use by the public. The federal government plans to retain about 58 percent of surplus property resulting from BRAC I and BRAC II closures; about half of that property will be used for wildlife protection, and a substantial portion will be used for parks and recreation, prisons, and Job Corps training sites. About 20 percent of the surplus property from those two rounds will be used for public facilities, including commercial airports, educational facilities, housing for the homeless, and state prisons. About 12 percent is slated for economic development programs to help offset the local economic effects of closing bases. DoD plans to sell about half of the remaining 10 percent of the property to private purchasers and has not yet completed plans for reusing the rest.

DEF-36 REDUCE PROFESSIONAL DEVELOPMENT EDUCATION

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	86	306	447	460	473	486	2,258
Outlays	77	283	430	454	469	483	2,197

Professional development education courses are designed to prepare both commissioned officers and noncommissioned officers (senior enlisted personnel) for new leadership and management positions or to provide them with advanced training. Those courses provide broad professional training in leadership and management, military science and national security policy, acquisition management, or advanced training in a particular field; they generally do not focus on specific job skills. The length of the training varies, but the time and number of personnel involved is substantial: on any given day in 1996, for example, an average of 12,600 personnel will attend professional development education programs in residence.

Most of this training is conducted by the individual services at 23 military schools and over 80 other military installations around the country. In many cases, personnel must undergo such training before receiving a promotion. About two-thirds of this training is for commissioned officers and one-third for noncommissioned officers. Almost all of the training is for active-duty personnel. Each service has both a command and staff college to prepare commissioned officers for midlevel staff duties and a senior service school, or war college, to prepare officers for senior positions. Courses at those leadership schools vary in length from 12 to 44 weeks. Senior enlisted personnel receive analogous training to prepare them for management positions; they take courses in leadership, human relations, and administration over a period of, typically, four to 40 weeks. Personnel can also meet some training requirements by taking military correspondence courses or by taking courses at local universities; the services incur little expense with such nonresidential leadership training.

Leadership training accounts for about half of residential professional development education. The remainder consists of sending personnel to military schools or civilian universities for undergraduate or graduate course work. That training is designed to encourage individuals to complete undergraduate degrees to improve the general educational levels of service personnel or to acquire advanced knowledge in their field.

Residential professional development training is expensive, costing the services over $900 million annually. The small size of many classes, the length of courses, and the salaries of military personnel while in training largely account for the high cost. The average annual cost per student in residence at a school is about $70,000.

During the 1980s, the services increased their investment in residential professional development training for both commissioned and noncommissioned officers by almost 50 percent. Unlike training levels for new enlistees and officers, which have fallen in tandem with the drawdown of military personnel, the amount of professional development training provided has remained at about the 1989 level. Training levels remained high in the Army Navy, and Air Force in part because the number of commissioned officers did not fall in proportion to the decrease in the number of active-duty personnel. In contrast, professional development training for noncommissioned officers rose dramatically even though the share of those eligible for that training fell.

At the same time, the average number of days of professional development training provided for all

eligible active-duty personnel has grown by almost 30 percent, from seven to almost nine days a year. Average annual training days will grow by 12 percent for commissioned officers and by over 80 percent for noncommissioned officers between 1989 and 1997. Those increases reflect greater emphasis on residential professional development, particularly for noncommissioned officers.

This option would decrease the amount of professional training conducted in residence by one-third in the next two years, saving almost $450 million by 1999. Savings would result not only from decreases in training expenses, such as the cost of materials and paying civilian instructors, but also from decreases in the total number of military personnel needed by the services. (DoD does not consider personnel in training to be available for other positions.) Such a reduction would adjust the level of professional residential development training to that set during the 1980s when funding for training and support of forces was at historically high levels. The services could distribute that reduction among the different types of professional development training, based on their requirements for officers of different ranks and for personnel with advanced training in particular areas.

Reducing professional development training would have some drawbacks. The reduction would run counter to the increased emphasis the services have placed on residential classroom training, which they believe is superior to training conducted by correspondence or on the job. Moreover, if the services continued to offer training to fewer students but retained the same number of locations, then the savings, though substantial, would not be proportional to reductions because the costs associated with bases, facilities, and equipment would only partially adjust to smaller loads.

The services have not offered any explanation of why proportionately more residential professional development training is needed in a smaller force. This option would encourage the services to concentrate their resources on the types of training they consider most important, to reduce the number of officers, and to look more carefully at opportunities to consolidate their training courses at fewer locations to improve efficiency and save money. Finally, military personnel concerned with advancing their careers could continue to take professional development training by correspondence, at their home bases, or at local universities on their own time if residential training was not available.

DEF-37 REDUCE FUNDING FOR DOE'S CLEANUP PROGRAM

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			Option to Cut Spending by 10 Percent				
Savings from the 1996 Funding Level							
Budget authority	616	616	616	616	616	616	3,696
Outlays	444	604	616	616	616	616	3,512
Savings from the 1996 Funding Level Adjusted for Inflation							
Budget authority	807	992	1,176	1,367	1,558	1,768	7,668
Outlays	582	924	1,121	1,310	1,501	1,706	7,144
			Administration's Plan to Improve Productivity				
Savings from the 1996 Funding Level							
Budget authority	99	517	949	1,387	836	208	3,997
Outlays	89	423	841	1,278	974	365	3,970
Savings from the 1996 Funding Level Adjusted for Inflation							
Budget authority	290	893	1,510	2,139	1,779	1,360	7,970
Outlays	227	743	1,347	1,972	1,859	1,455	7,603

The Department of Energy (DOE) is engaged in a massive effort to resolve environmental problems at its nuclear weapons complex. The complex comprises more than 100 sites in 36 states and territories where radioactive materials were processed and nuclear weapons were produced beginning in the early 1940s.

In 1996, the Congress appropriated $6.2 billion to DOE for its environmental management (EM) program. Of that total, about one-third is for environmental restoration; the rest is for managing hazardous (including radioactive) and nonhazardous wastes, stabilizing nuclear materials and facilities, researching and developing technologies for more effective cleanup, and general management and oversight.

Under this option, DOE's EM budget would be cut 10 percent relative to the 1996 level. Savings in outlays from the 1996 funding level would be $444 million in 1997 and $3.5 billion over the 1997-2002 period. Measured from the 1996 level adjusted for inflation, outlay savings would be $582 million in 1997 and $7.1 billion over the six-year period. A 10 percent cut is consistent with a recent DOE estimate that 49 percent of the budget for waste management and cleanup activities addresses high risks to the public, workers, or the environment and 39 percent addresses medium risks. Other cleanup activities carried lower risks that would not cause significant effects in the next 10 years.

The President's 1997 budget proposes to reduce spending for defense environmental restoration and waste management through productivity improvements that would reduce costs. Those reductions would create six-year savings of nearly $4 billion relative to the 1996 funding level and $7.6 billion

relative to the 1996 level adjusted for inflation. Because the President's proposal does not specify how the productivity improvements would be attained, CBO has not incorporated it into the option that would reduce spending by 10 percent. If DOE could achieve the productivity gains it proposes and also defer cleanups that present a relatively low environmental risk, savings would be greater than those shown in the table.

The option that defers cleaning up lower-risk sites might prevent DOE from complying with agreements it has made with the Environmental Protection Agency (EPA) and state regulatory agencies. Those agreements establish specific milestones that DOE must meet or face fines and other penalties. DOE estimates that 7 percent of the EM budget is for cleanups that present a low risk but are of high priority in complying with those agreements.

Congressional action might be needed to avoid exposing DOE to penalties for not meeting the milestones. The Congress, for example, could direct DOE to renegotiate agreements so as to postpone noncritical cleanups--especially where the risks to cleanup workers are high relative to the risks of continuing to monitor the site and where technologies are not currently available for effectively treating and disposing of hazardous and radioactive wastes. The renegotiated agreements might also allow lower standards of cleanup on sites destined for industrial use and greater flexibility in the choice of cleanup methods.

Such actions could substantially reduce cleanup costs. DOE estimates that its recent renegotiation of the Hanford Tri-Party Agreement has saved more than $1 billion. Although each situation is unique, state regulators and EPA have incentives to renegotiate the agreements. In most cases, they entered into the agreements long before enough information was available to assess the potential benefits and costs of specific cleanup actions. As more information becomes available, they may decide to reconsider their priorities.

The Congressional debate over reauthorizing the Superfund program includes many of the same questions about cleanup goals, suitable standards for waste disposal, and the appropriate balance of risks and costs. The resolution of those issues could serve as guidance for DOE's cleanup policies and, combined with reductions in appropriations for DOE, could save large sums of money.

Supporters of DOE's current plans point to substantial progress in managing the cleanup program effectively. They acknowledge that the program had management problems in its early years--problems common to new, rapidly growing programs and exacerbated by DOE's tradition of secrecy in its nuclear weapons mission--but claim that DOE is now on the right track. Making cuts could introduce more turmoil into a program that is just becoming stabilized. In addition, communities neighboring the contaminated facilities would probably object to delays and changes in cleanup standards unless they would lead to safer methods and more effective solutions, including turning DOE facilities over to other industrial uses.

DEF-38 CONSOLIDATE PILOT TRAINING AND DELAY BUYING THE JOINT PRIMARY AIRCRAFT TRAINING SYSTEM

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	158	197	233	338	402	480	1,808
Outlays	10	98	175	281	336	486	1,386

NOTE: The Administration, in its 1997 budget request, has revised its plan for this system. Appendix A shows savings against the 1997 plan.

The United States invests substantial resources in training its military personnel, on the premise that well-trained fighting forces are most likely to win wars quickly with the fewest deaths. To provide personnel with the necessary skills to serve effectively in combat or support units, the services train individuals at various training bases, often in a classroom setting.

With the drawdown in force structure, the total amount of individual training that is needed has dropped substantially. For example, the amount of pilot training, one of the most expensive types of individual training, dropped by more than 40 percent between 1985 and 1996, as measured in training loads, which reflect both the number of students and the length of the course. Based on the amount of training conducted in the past at the 11 flight-training bases that will remain after base closures are completed, the services together will have about 30 percent more space and facilities for training pilots than they will need in 2002.

The Army, Navy, and Air Force each operate separate training establishments for pilots. In recent years, leaders in both the Congress (former Senator Goldwater and Senator Nunn) and the Department of Defense (former head of the Joint Chiefs of Staff General Powell and former Secretary Aspin) have proposed consolidating pilot training. The study of roles and missions that the Joint Chiefs of Staff sent to the Congress in 1993 also recommended consolidating undergraduate training for pilots of fixed-wing aircraft and evaluating the consolidation of training for rotary-wing (helicopter) pilots. The current consolidation of undergraduate pilot training is limited to a modest exchange program between the Navy and the Air Force, affecting only some 10 percent of the undergraduate training for pilots of fixed-wing aircraft.

Plans to expand joint training have been put on hold because of the slippage in the schedule for purchasing the new training aircraft--the Joint Primary Aircraft Training System (JPATS). DoD has no plans to consolidate helicopter training. In the 1996 budget, DoD stretched out the purchase of the JPATS aircraft, delaying purchase of the last aircraft from 2006 to 2014. The Navy, for example, will have bought its first plane and the Air Force less than one-quarter of its fleet by 2000. In February 1996, DoD signed a contract with Raytheon for its Beech Pilatus PC-9 MKII aircraft after a bid protest from Cessna aircraft company was rejected. Whether the bid protest will cause further slippage in the program's schedule is not clear.

This option would consolidate undergraduate training of pilots in all services. Capitalizing on similarities in the skills learned during the initial phase of flight training, this option assumes that all Navy and Air Force pilots of fixed-wing aircraft would undergo common core training using the T-34 aircraft, the Navy's current trainer, rather than wait for delivery of the new JPATS trainer. The T-34 is inexpensive to operate and should be available in sufficient numbers to train both Navy and Air Force pilots until the middle of the next decade. One service would conduct all fixed-wing training. At the same time, the Army, Navy, Air Force, and Coast Guard would

all conduct their basic helicopter training under one service and in one location, using the current fleet of Navy and Army training helicopters. This option would also change the current practice by which all Navy and Marine Corps pilots train initially in fixed-wing aircraft, including those who later become helicopter pilots.

Consolidating the services' pilot training programs and delaying the procurement of JPATS would result in six-year savings of $1.8 billion compared with the Administration's 1996 plan. DoD could delay procurement because the Navy's T-34 would be used for most of the Air Force's fixed-wing training. Since the T-34 has some remaining years of service life and the Navy has a sufficient inventory, DoD could delay buying JPATS until early in the next century. In addition, DoD would need to purchase about 120 fewer JPATS aircraft because Navy and Marine Corps personnel designated as helicopter pilots would no longer initially train in fixed-wing aircraft, saving an additional $800 million over the life of the program. Six-year savings from the Administration's 1997 budget request would be $1.4 billion, with additional savings of over $500 million from buying 120 fewer aircraft over the life of the program. Savings from the 1997 budget are lower because DoD selected a turboprop rather than a more expensive jet aircraft.

Continuing to rely on the T-34 for fixed-wing training and delaying the purchase of JPATS would mean that the Air Force and Navy would not reap the advantages of using a new trainer until a later date. Those advantages include an ejection seat that operates at ground level, a digital cockpit common to aircraft that pilots will fly later, the ability to train at higher altitudes, and a redesigned cockpit to accommodate smaller people, making it easier for women to become pilots. The Air Force considers the T-34 aircraft unacceptable for its training needs, primarily because it lacks those features. Although the T-34 does not have an ejection seat, DoD considers it safe. In addition, if the Air Force individually screened pilots who did not meet physical size requirements, as the Navy does now, about 80 percent of female pilot candidates could train in the T-34. That is the same standard required of the new JPATS aircraft. A majority of students will not receive the benefits of the new technology until 2007 because of the stretch-out of the program last year.

Consolidating pilot training could improve training and reduce both the size of the training infrastructure and operating costs. Training jointly could lead to the adoption of "best practices" from each service and foster interservice cooperation, which is increasingly important as the United States turns to joint operations in response to crises. Since all training of a particular type would be conducted at one or two bases, the services would be able to close two or three of the 11 remaining flight-training bases, eventually saving about $230 million each year by 2002, assuming a new base closure commission is convened in 1997 (see DEF-35). The cost of operating training aircraft would also be lower because the Navy's T-34 costs about half as much to fly as the T-37, the Air Force's current trainer. In fact, jointly conducting initial training would reduce current operating and support costs by almost $600 million through 2002 by deactivating T-37 aircraft squadrons that would no longer be needed. The services could, however, face one-time costs to move aircraft between training bases and to close bases.

The Navy, Marine Corps, and Coast Guard would all object to adopting common helicopter training because they prefer that their helicopter pilots receive initial training in a fixed-wing aircraft. The Navy believes that such training improves its ability to select the highest-quality pilots for fixed-wing fighter training. Recent research suggests, however, that relying on other methods to select fighter pilots would be almost as effective. The Marine Corps and the Coast Guard prefer to train all their pilots in fixed-wing aircraft initially because a few of their pilots fly both fixed- and rotary-wing aircraft. Under this option, those pilots would undergo both types of training.

DEF-39 INCREASE COMPETITION BETWEEN PRIVATE-SECTOR AND DEPARTMENT OF DEFENSE HOUSING

Savings from the 1996 Plan	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	600	680	720	710	700	690	4,100
Outlays	150	320	470	580	640	650	2,810

Approximately two-thirds of the military families in the United States receive cash housing allowances and rent or purchase housing in the private sector. The remaining third live in housing units provided by the Department of Defense. The department's policy is to provide housing units only if the private sector is unable to provide adequate, affordable housing. Nonetheless, DoD does not plan to reduce its housing stock in proportion to the ongoing reduction in U.S. military forces. As a result, CBO projects that the percentage of military families in the United States living in DoD housing will increase from 30 percent in 1990 to 35 percent in 1997. That increase means higher costs for DoD. Over the long run, the average annual cost of providing one unit of DoD housing (including the amortized cost of construction) is approximately $12,000, compared with approximately $7,600 for housing allowances.

DoD's plan for military family housing also presents a funding problem in the near term. Because much of the department's housing stock is near the end of its service life, maintaining that stock will require an immediate investment program. DoD is evaluating approaches (such as partnerships with private developers or the formation of a quasi-governmental housing authority) that might provide access to private investment funds. The use of private credit would reduce the need for appropriations in the near term but would probably not reduce the government's cost for on-base housing over the long run.

This option offers an alternative approach that might both resolve DoD's immediate funding problem and reduce the long-term cost of ensuring that military families have adequate housing. Under this option, all military personnel eligible for family housing would receive cash housing allowances regardless of whether they lived in DoD or private-sector units. Each family would be free to choose between DoD and private-sector housing. In the short run, DoD housing managers at each installation would set rents at market-clearing levels (levels at which there would be neither excess vacancies nor waiting lists). In the long run, DoD would revitalize and replace units only if the value of the new unit to service members (the rent that it could command) was sufficient to cover operating costs and amortized capital costs.

Under this approach, DoD housing would for the first time compete with private housing on a level playing field. Currently, only families living in private-sector housing pay rents that cover the full cost of their housing. The housing allowance that families in DoD housing forfeit (which is, in effect, the rent they pay) is on average equal to about 60 percent of the costs that the federal government incurs in providing a unit. In effect, DoD subsidizes the cost of on-base housing. That subsidy contributes to the demand by military families for on-base units, making it difficult for the department to reduce its housing stock and require greater use of private-sector housing.

Total savings under this option compared with CBO's estimate of the Administration's 1996 plan could amount to $600 million in 1997 and $4.1 billion through 2002. Some of those savings would result from more efficient management of existing units as the on-base units were forced to compete with less costly private-sector housing. Other savings would result from lower revitalization and replacement costs. DoD would retire aging units rather

than undertake investment projects that would not be justified by the value of the units to service members (as indicated by projected rental payments).

These estimates reflect the cost of raising the housing allowances to hold constant the total out-of-pocket cost that service members incur (the difference between their total expenditures on housing and the total amount of allowances provided). As a result, they reflect real resource savings, not the fact that service members would have to pay higher rents for DoD housing.

One disadvantage of this option is that it represents a significant break with tradition. At least since the onset of the Cold War, a substantial minority of married service members have lived in housing that DoD provided "free" in lieu of cash allowances. Because this option would eliminate that practice, it could be perceived as a reduction in the level of total compensation (despite the offsetting increase in housing allowances for the military as a whole). In addition, unless DoD responded to competition with private-sector housing by dramatically reducing the cost of providing on-base housing, the number of families living on base would gradually decline as DoD units were retired. That change in housing patterns would be a disadvantage in the eyes of people who feel that the on-base lifestyle makes an important contribution to military spirit.

Other disadvantages include the costs of determining initial rental rates and collecting rents. Special arrangements would have to be made for historic units (units that DoD must maintain even if rents do not cover costs) and for personnel who are required to live on-base to be available in the event that military needs arise (approximately 3 percent of all personnel). Since a rental system might have to be phased in as individuals started new tours, inequities might exist initially between people under the old system and those under the new.

Yet this unsubsidized system of market-clearing rents offers some important advantages. It would eliminate the frustration and costs borne by military families under the current system in which waiting lists are used to ration on-base units. Service members would no longer have to move into a private-sector unit at the beginning of their tour only to move again into an on-base unit when they reached the head of the waiting list. In addition, rental prices under this option would provide a clear signal to housing managers about the value of on-base housing to service members. With those price signals guiding investment decisions for on-base housing, the location, quality, and number of units would be more likely to reflect the preferences of military personnel than they do under the current system.

Perhaps most important, allowing private-sector housing to compete with on-base housing on a level playing field would, over the long run, enable the department to provide service members with the same quality of life at lower cost. Although presented here as an alternative to DoD's current housing system, the use of unsubsidized, market-driven rents for military housing might offer similar advantages regardless of whether the units were controlled directly by DoD, a quasi-governmental housing authority, or a public/private partnership.

DEF-40 RAISE TOBACCO PRICES IN MILITARY COMMISSARIES TO NEAR MARKET LEVELS

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	46	96	150	155	159	164	770
Outlays	46	90	142	152	158	163	750

The Department of Defense operates a system of commissaries, or supermarkets, for the benefit of current and retired members of the armed forces and their dependents. Commissary prices on most grocery items are approximately 28 percent below commercial retail prices. Savings on tobacco products are much greater, however--41 percent at commissaries in the United States and close to 49 percent at those in overseas locations. This option would raise tobacco prices in commissaries, limiting patrons' savings to no more than 10 percent, including sales tax. CBO estimates that this option would save the federal government a total of $770 million from 1997 through 2002.

Commissaries are able to sell goods at below-market prices because they receive approximately $1 billion annually in support from taxpayers. That subsidy enables commissaries to price all goods at the wholesale cost plus 5 percent. Savings are particularly great for tobacco products because DoD does not pay state or local excise taxes. Savings are even greater overseas where federal excise taxes are excluded as well. Another factor contributing to low tobacco prices in commissaries is that tobacco companies offer many brands to DoD at a lower price than they charge to their commercial customers.

Low tobacco prices make commissaries a very attractive shopping alternative for smokers. Tobacco products account for 4 percent of sales in commercial grocery stores and supermarkets. In contrast, if the goods sold in commissaries were valued at commercial prices, tobacco would account for 12 percent of commissary sales in the United States and 8 percent overseas. Tobacco sales are particularly important to commissaries in the United States because low tobacco prices attract retirees and other patrons who might otherwise choose to shop at more convenient commercial supermarkets.

Savings under this option reflect the impact that the higher tobacco prices would have on the mix of goods sold in the commissaries, the total level of sales, and the commissaries' operating costs. CBO's estimate assumes that the increase in price would cause the ratio of tobacco to other goods sold in commissaries to fall to the level seen in commercial supermarkets. It also reflects a possible 10 percent drop in sales of nontobacco products in U.S. commissaries as retirees and others who had been attracted by the low price of tobacco started to shop elsewhere. Declines in commissary sales result in savings because most of the cost of operating commissaries is paid for out of appropriated funds. Thus, total DoD savings include both additional revenue from the higher tobacco prices charged to commissary customers and reduced operating costs in commissaries as a result of the decline in sales. CBO's estimate also assumes that the prices that tobacco manufacturers charge the commissaries would rise to match the prices charged to private retailers.

Because CBO's estimate is based on uncertain assumptions about sales, savings could be lower. Yet DoD's savings would be significant under even the most extreme assumptions. Even if tobacco sales fell to commercial levels and sales of other goods were unaffected, DoD would save over $70 million annually. Moreover, savings would exceed CBO's estimate if sales of nontobacco products fell by more than 10 percent or if tobacco sales remained above commercial levels.

The principal disadvantage of this option is that current and former military personnel and their de-

pendents would face higher prices for tobacco. Military retirees, who purchase approximately 70 percent of the tobacco sold by commissaries in the United States, would bear most of the loss. It might be unfair to require retirees who live on fixed incomes and are accustomed to very low tobacco prices (and who may have become smokers while serving in the military) to pay a price that is only 10 percent below the market rate. Active-duty personnel would also be affected; one out of three smokes cigarettes, and one out of eight uses chewing tobacco.

Although commissary sales of nontobacco products would decline under this option, that decline is not necessarily a disadvantage. People would stop shopping at commissaries for nontobacco products only if they saved more in travel costs and convenience than they paid in higher grocery bills. As a result, the reduction in commissary sales of nontobacco products resulting from higher tobacco prices would save commissaries' operating costs without reducing the welfare of eligible patrons. Declines in commissary sales could harm patrons indirectly, however, by bringing into question the need to maintain stores that have low sales.

This option offers several advantages in addition to the savings that it would generate for the federal government. State and local revenue from excise and sales taxes would rise because some people would stop shopping at commissaries and start purchasing tobacco and other goods at commercial supermarkets. This option might improve the fitness and long-term health of military personnel by reducing their use of tobacco. Higher prices for tobacco would also be more consistent with DoD's policies that seek to "deglamorize" the use of tobacco by service members. Those policies have already led the Navy to raise the price of tobacco sold in military exchanges to within approximately 10 percent of commercial prices. Finally, even if this option did not reduce the use of tobacco, some citizens might prefer that their taxes not be used to subsidize the cost of selling tobacco in the United States or the cost of shipping it overseas for sale to military personnel.

DEF-41 REDUCE THE DoD CIVILIAN ACQUISITION WORKFORCE

Savings from the 1996 Plan	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	80	450	1,040	1,880	2,090	1,990	7,530
Outlays	80	440	1,020	1,850	2,090	2,000	7,480

The Department of Defense has reduced its civilian workforce substantially since the late 1980s, in keeping with the overall reductions in its force structure. Total defense civilian employment decreased from about 1.09 million employees in 1988 to about 850,000 in 1995, a reduction of some 22 percent. As a part of the overall cutback, the department reduced the number of civilian jobs allocated to acquisition (the development and procurement of weapon systems and items needed to support military operations) by a slightly larger proportion--about 24 percent--during the same period.

The National Defense Authorization Act for Fiscal Year 1996 required the Secretary of Defense to submit a plan to reorganize and consolidate defense acquisition organizations to eliminate duplication of functions and reduce management overhead. The Congress directed that the plan reduce the number of military and civilian personnel in acquisition organizations by 25 percent between 1995 and 2000. The Congress also directed that at least 15,000 of those positions be eliminated during the first year. Under this option, the Congress would adopt DoD's reorganization plan, saving about $7.5 billion over the next six years.

The department could reduce the number of civilian acquisition personnel and achieve significant savings through streamlining and consolidating the existing military command structure that governs defense acquisition. That task is carried out by 20 major organizations among the three services, the Defense Logistics Agency, and a number of small components in various defense agencies. Although numerous internal reorganizations have occurred within those commands, DoD has not undertaken a comprehensive overhaul of the acquisition command structure itself. The only significant revision occurred in 1992 when the Air Force merged three commands into the Air Force Materiel Command. As a result of that reorganization and the overall defense drawdown, about 34 percent fewer civilian employees worked for the Air Force Materiel Command in 1994. Previous consolidations that created unified agencies such as the Defense Logistics Agency and the Defense Mapping Agency have also resulted in fewer jobs and greater efficiency. Depending on how it was planned, however, reorganization could require initial expenditures if personnel and equipment needed to be relocated. Such initial expenditures could offset savings in the short term and delay their realization.

Some Members of Congress have proposed forming a single defense civilian acquisition agency, estimating that by doing so DoD could reduce the number of acquisition management personnel by between 25 percent and 30 percent. However, although consolidation could reduce the size of the workforce, having a single acquisition agency may not be appropriate in view of the separate characteristics of the services' purchasing needs. Such an agency would still consist of components dedicated to developing, procuring, and supporting land combat vehicles, ships, aircraft, and other major systems. Given the redundancy in the current organizational scheme, consolidations could occur without requiring a complete overhaul of the acquisition bureaucracy.

Reforming the acquisition process could also achieve savings and reduce the need for civilian workers. The Federal Acquisition Streamlining Act of 1994, for example, includes a variety of measures to simplify the acquisition process. Raising the threshold requirements for cost and pricing data and

for procurement actions that would trigger government oversight, for example, promises to reduce the department's workload considerably. DoD expects to save billions of dollars by relying more on commercial products than on costly military specifications in purchasing goods and equipment. The department has also reexamined the process that governs procurement of major weapon systems. The review, which was headed by the Defense Acquisition Board and supported by the services' own acquisition management structures, was intended to reduce overhead and to ensure that the smallest number of people were involved and that coordination was minimized. The department has already begun to implement various streamlining measures the board recommended, such as using integrated product teams to reduce the number of oversight meetings and paperwork required to support the acquisition process.

Although such reforms could result in efficiencies and the need for fewer employees if they are successful, past efforts at procurement reform have not generated the major breakthroughs the department and the Congress have hoped for. Nearly every Administration in the past three decades has tried to reform the acquisition process. Yet acquisition costs for weapons continue to increase beyond initial expectations. Reducing the size of the civilian workforce before policy reforms have proved their effectiveness could jeopardize their potential to be integrated into the acquisition process.

The department could cut back the acquisition workforce since the services are purchasing considerably fewer weapons than in the past. In 1990, for example, DoD bought 392 fixed-wing aircraft; this year the Administration has requested authorization to purchase only 73. The Navy is buying many fewer ships, and the Army is no longer building new tanks. Moreover, the services are developing fewer new systems to manage. In 1991, the Defense Acquisition Board oversaw 131 major programs compared with only 104 in 1997. DoD, however, plans to raise overall acquisition spending by 19 percent between 1997 and 2001, increasing the value of the procurement workload and placing a greater burden on a smaller workforce. During the past decade, reductions in the acquisition workforce have generally corresponded to reductions in procurement spending.

DEF-42 ENCOURAGE PRIVATE OWNERSHIP OF INDUSTRIAL ASSETS USED IN DEFENSE PRODUCTION

Savings from the 1996 Plan	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	320	330	340	350	360	370	2,070
Outlays	240	300	330	340	350	360	1,920

Contractors producing goods and services for the Department of Defense currently hold over $8 billion worth of government-owned industrial plant equipment (IPE) and other plant equipment (OPE). IPE includes metal presses and milling machines that are widely used in industry; OPE includes items such as commercial computers, filing cabinets, and desks. Believing that private ownership would be more economical, DoD officials have sought since the early 1970s to reduce the department's role in providing such assets.

This option would facilitate DoD's efforts to reduce its inventories of both types of equipment. It provides for legislation that would grant the General Services Administration (GSA) clear authority to negotiate the sale of equipment to the holding contractor in situations in which continued DoD ownership was not necessary but the contractor required the equipment for defense production. Moreover, in future contracts in which the contractor could demonstrate that it was in DoD's best interest to provide equipment, contractors would have to obtain the assets from DoD on an explicit rental or lease basis. Rental charges for DoD-owned equipment would encourage contractors to invest in their own equipment. (Under the current system, the department does not charge contractors rent for the use of IPE and OPE in defense production. Instead, DoD benefits to the extent that providing such assets lowers the prices of the goods and services that contractors provide.)

DoD's desire to reduce its role in providing industrial assets to defense contractors appears to be justified. Contractors complain that the costs of tracking such equipment in accordance with government standards sometimes outweighs the value of the assets. Government auditors report that items are sometimes lost and that contractors hold on to unneeded or underused items rather than return them to DoD. The costs DoD incurs in providing industrial equipment are not fully reflected in the estimates of weapon system costs that are used in making program decisions. The benefits to DoD--the lower prices paid for the goods and services that contractors provide--are uncertain. Because contractors are generally not free to use DoD assets to produce goods and services for non-DoD customers, they may be discouraged from integrating defense and commercial production and may thus lose economies of scale. Moreover, contractors with access to assets supplied by the government may have little incentive to invest in more modern and efficient equipment.

The department's efforts to reduce inventories, however, have not been very successful. Today, the total value of industrial and other plant equipment appears to be slightly above the 1990 level. Improved reporting of assets may be partly responsible for that increase, but another factor is that GSA lacks clear authority to conduct negotiated sales of IPE and OPE to the contractors who hold those assets. (GSA already has the authority to conduct such negotiated sales of real property that DoD identifies as necessary for defense production but feels it does not have to own.) By providing that authority, this option would permit DoD to divest itself of IPE and OPE without disrupting the work of the contractors using those assets in defense production.

DoD has also found it difficult to enforce policies that limit the provision of DoD-owned equipment to contractors while still giving program managers the flexibility to provide equipment when it is in DoD's interest to do so. Program managers may have an

incentive to try to help contractors and reduce measured program costs by authorizing the use of DoD equipment whenever they can. The rental payments required under this option would eliminate that incentive by making the costs of DoD-provided equipment clearly visible. The Defense Logistics Agency or GSA could be responsible for setting rents at levels that would fully amortize the cost of the equipment and the overhead costs associated with its management (including the costs of carrying inventories). Faced with such rental prices, contractors would have a strong incentive to purchase their own equipment.

CBO estimates that savings under this option could amount to $2.1 billion between 1997 and 2002. That estimate reflects reduced purchases of new equipment for the use of contractors but does not include revenues from asset sales. Although sales of federal assets reduce the deficit in the short run, they do not count as savings under the provisions of the Budget Enforcement Act. Over the long run, part of the savings from fewer government purchases of OPE and IPE would be offset by higher prices for defense goods. Some savings would remain, however, since contractors who provided their own capital would try to use it efficiently and would not have to bear the cost of monitoring and tracking government-owned assets.

The need to set explicit rental prices and enter into rental agreements with contractors is one disadvantage of this option. In practice, however, rental agreements would be needed only when it was in the government's interest to provide equipment and when renting was more attractive to the contractor than either a negotiated purchase from DoD or a purchase from a commercial source. Another potential disadvantage is that the government might not receive as high a price in a negotiated sale as it would if the asset was declared excess federal property, removed from the hands of the contractor, and sold to the highest bidder. Limiting GSA's authority to conduct such sales to a three- to five-year period might alleviate that concern while still permitting DoD to reduce existing inventories of industrial and other plant equipment.

DEF-43 ELIMINATE NONAPPROPRIATED FUND SUBSIDIES TO MORALE, WELFARE, AND RECREATION ACTIVITIES THAT OPERATE LIKE BUSINESSES

Savings from the 1996 Plan	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	220	230	230	240	250	250	1,420
Outlays	170	220	230	240	240	250	1,350

The Department of Defense operates three distinct categories of activities that support or improve the morale and welfare of military personnel and the recreational opportunities available to them. Category A activities are those that it considers "mission sustaining" (such as gymnasiums, fitness centers, and libraries). Category B activities provide basic community support (such as arts and crafts, child care, and youth programs). Category C activities provide goods and services similar to those offered by private enterprises in civilian communities (such as golf, bowling, clubs for officers and for enlisted personnel, department stores managed by the military exchange system, fast-food outlets, and slot machines in overseas locations).

Each category relies on a different mix of funds appropriated by the Congress and nonappropriated funds (NAF) derived from user fees and sales receipts. Appropriated funds cover much of the cost of category A and B activities. Even in civilian communities, many of those types of recreational activities receive some public funding. In contrast, category C activities receive only limited support from appropriated funds and depend primarily on fees and receipts to cover their costs. The Congress's intent is that category C activities that are not in isolated locations will be largely self-supporting.

In some types of category C activities (such as telephones, exchanges, liquor stores, slot machines, recycling programs, and financial investments made with nonappropriated funds), total nonappropriated fund receipts exceed the operating costs that they must cover. For example, in 1994 those six activities generated net revenue of more than $400 million after depreciation and other NAF costs. DoD used part of those earnings, together with appropriated funds, to help cover the costs of category A and B activities that have only a limited ability to generate their own revenue. DoD invested another portion of those earnings in buildings and equipment for category C activities. CBO estimates that the department also used approximately $200 million of the net revenue generated by profitable category C activities to cover losses in other category C activities. (That estimate includes allocated overhead costs and does not count as income the earnings transferred from one category C activity to another that is losing money. In contrast, DoD's accounting methods, which do not always fully allocate overhead costs and commonly count such transfers as income, do not show those losses.)

This option would prohibit the military services from using the earnings generated by one type of category C business activity to subsidize the losses or the overhead costs of another. Instead, DoD would be required either to use those earnings to support category A and B activities or to reinvest the money in the activities that generated the earnings. DoD would thus have to manage each category C activity so that the revenue the activity generated, together with any authorized support from appropriated funds, would cover its operating costs, including overhead and depreciation.

This option would allow the Congress to reduce the amount of appropriated funds for category A and B activities by about $200 million annually without affecting either the level of services or the fees charged for those activities. Those savings estimates assume that each type of category C business activity would be required to at least break even. An individ-

ual golf course could incur a loss, but golf courses as a whole could not. Because some establishments within each business activity lose money, the total amount of nonappropriated funds generated by category C establishments that have positive net revenue is much greater than those estimated savings indicate. A more stringent approach, which would require each category C establishment that was not in an isolated location to operate at least on a break-even basis, would yield even greater savings.

Some restriction on the use of NAF earnings may be necessary if the Congress's efforts to limit the use of appropriated funds by category C activities are to have any impact on DoD's total allocation of resources. Under the current system, DoD's freedom to transfer nonappropriated funds to activities that experience losses means that it can operate activities at a loss for an indefinite period even without appropriated funds. DoD can overcome the limits on the level of appropriated funds used by officers' clubs, for example, by allocating the NAF earnings generated by the exchanges or slot machines to the clubs rather than to category B activities, which remain eligible for appropriated funds. There is some indirect evidence that this kind of substitution is taking place. According to DoD figures, the amount of nonappropriated funds spent in category A and B activities fell by almost 15 percent between 1992 and 1994 compared with only a 3 percent drop in category C.

Subsidies for businesslike activities--whether paid for out of appropriated or nonappropriated funds --may not be a wise use of DoD's resources. Outside of isolated areas, the inability of a business activity to break even probably indicates that service members have other, more attractive recreational opportunities. Requiring category C activities to cover their costs is one way to ensure that the value of the activity to today's service members warrants the cost of providing it. That rationale might underlie the Congress's decision to limit the use of appropriated funds in category C activities. Extending that limit to support from nonappropriated funds could be a logical next step. In today's austere fiscal climate, it is important that all funds for morale, welfare, and recreation, regardless of their source, be used to provide the greatest possible benefit to service members.

There are different interpretations, however, of what breaking even means, and one might argue that the break-even criterion in this option is too generous or too restrictive. On the one hand, including depreciation charges as a cost might seem overly restrictive; depreciation charges often reflect sunk costs (those already incurred) rather than the cost of providing current services. On the other hand, this option would allow DoD to operate individual facilities that did not cover their depreciation charges to the extent that other, similar facilities produced earnings after depreciation. It would also allow activities to count any support they received from appropriated funds as if that support was business revenue. Moreover, this option would not require DoD businesses to take account of the cost of land, the cost of capital apart from depreciation, or the tax revenue that local governments would lose because of DoD's federal status.

This option has some clear disadvantages. Restricting the services' ability to use nonappropriated funds to subsidize business activities would force the services to reduce costs, increase prices, or close some category C establishments (including golf courses, theaters, bowling alleys, clubs, and hotels). If prices were raised or establishments closed, then service members, retirees, and other eligible patrons would experience a loss. Many of the activities that might suffer, such as officers' clubs, represent traditional features of military life. Subsidies that encourage service members to seek recreational opportunities on-base may be warranted because they contribute to the sense of community within the military.

These disadvantages might not be insurmountable. If subsidies for a particular activity could be justified, perhaps on the grounds that the activity enhances the cohesion of military units, the Congress would be free to authorize appropriations or to move the activity from category C to category B. This option would limit only nonappropriated fund subsidies, which are not currently controlled by the Congress. Moreover, a recent study by the Logistics Management Institute provides evidence that many category C activities that do not currently earn a return could do so under more professional management. To date, DoD has been reluctant to embrace the kinds of far-reaching reforms--for example, mov-

ing to central management of category C activities under the military exchange system--that some analysts believe would reduce costs and provide better service. By restricting DoD's ability to subsidize losing operations, this option could provide a needed catalyst for improving management. In addition, it would ensure that DoD measured the earnings and losses of category C activities in a more meaningful way.

DEF-44 PRIVATIZE PUBLIC MAINTENANCE DEPOTS AND USE COMPETITION TO ALLOCATE TASKS

Savings from the 1996 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	-30	-20	-10	0	160	320	420
Outlays	-20	-20	-10	0	120	270	340

The Department of Defense spends almost $13 billion annually on maintenance of military equipment at the depot level. Large, government-owned industrial facilities, employing approximately 95,000 DoD civilian personnel, perform over two-thirds of that work. Contracts with private firms for maintenance services account for the remaining third. DoD has divided depot-level maintenance between the public and private sectors in roughly that same proportion since at least the mid-1980s. Yet recent policy statements by John White, the Deputy Secretary of Defense, indicate that DoD will seek to reduce the future role of the public depots.

That policy shift reflects changes in U.S. security requirements. During the Cold War, DoD argued that it needed to rely on public depots because of the risk that the private sector might be unable to meet the surge in maintenance that a full-scale mobilization and protracted combat against a well-armed enemy would generate. Current warfighting scenarios, which assume regional rather than global conflict, mitigate that risk.

During brief regional conflicts, maintenance at the depot level would focus primarily on repairing components of weapons and other equipment and on special, unexpected modifications or manufacturing tasks. The surge in overhauls and repairs on major items such as tanks, aircraft, and ships would not occur until the conflicts were over and the damaged equipment was returned to the United States. Moreover, firms in the defense industrial base would not be fully occupied with producing new equipment during a regional conflict and might be called on to perform maintenance tasks. Some analyses suggest that rather than attempt to maintain a ready and controlled source for in-house repairs, DoD might be able to obtain the most versatile, responsive maintenance in wartime by focusing on establishing rapid, reliable access to the private sector. DoD already relies on the private sector to repair many specialized components on its most up-to-date systems.

Relying on the private sector might also reduce the cost of depot-level maintenance. According to a number of studies, including the report of DoD's Commission on the Roles and Missions of the Armed Forces, competition among private firms would permit DoD to achieve significant savings. Direct comparisons between the costs of public depots and private repair firms are difficult to make. Nonetheless, the relevant economic theory, as well as empirical studies dealing with a wide range of industries, supports the view that private production in a competitive environment is less costly than public production. Shifting from public to private production frequently results in savings of 20 percent to 40 percent. Savings are most likely to accrue for tasks that permit both competition and the use of standard contracts. At the depot level, such tasks might include routine overhauls of combat systems and repair of equipment that has close commercial counterparts. CBO estimates that, in the long run, DoD might save on the order of $1 billion annually if it used public depots only for those tasks that could not be handled competitively in the private sector.

Despite the potential for savings, whether DoD will be able to implement its new policy is uncertain. One difficulty the department faces is the existence of an established system of public depots with a large, experienced labor force and a substantial investment in capital. Little money is saved when DoD transfers maintenance tasks to the private sector but retains excess capacity in the public depots. Yet the

process of closing public depots is lengthy and politically charged. Current law that requires DoD to perform at least 60 percent of its maintenance in public depots is founded in part on the concern that moving the workload to the private sector would unfairly hurt current depot employees. Supporters of public depots also point out that DoD facilities are the most efficient and experienced sources for particular types of maintenance. Even if those facilities could be operated more efficiently under private management, closing them now only to permit their possible reuse under private ownership at a later time seems counterproductive.

To address those concerns, this option would shift depot-level maintenance work from the public to the private sector but would allow current employees of the public facilities to compete for that work. The Congress would establish a two-stage process for converting public depots to private ownership. In the initial stage, a public corporation--with the Treasury as the stockholder--would manage existing maintenance depots on a businesslike basis. Although DoD would grant the corporation some initial maintenance contracts, the 60 percent rule would be revoked and the corporation would be forced to compete with private firms for future work. To make the playing field as level as possible, the corporation would be required to pay taxes and manage its assets in an effort to earn a return on capital.

After a predetermined and relatively brief transition period (perhaps on the order of six years), the government corporation would sell most of its assets. Depots that had demonstrated the ability to compete successfully for contracts could be sold to private investors as going concerns. Any facilities the corporation operated that had proved unable to compete would be closed and their assets sold. (A small number of facilities might be left either under DoD's control or under the control of the government corporation on the grounds that some tasks, because of economies of scale and highly specialized capital requirements, cannot be handled competitively in the private sector.)

Over the long term, savings under this option would stem from the effectiveness of competition in reducing costs and from the greater freedom that private managers would have to make cost-effective decisions about the use of resources. Yet despite the potential for substantial long-run savings, costs would probably outweigh savings for several years. As DoD gradually reduced the amount of work it allocated on a sole-source basis to the corporation depots, it would incur costs--for example, for purchasing the rights to the technical data needed to permit competition and for conducting competitions. In addition, depending on the ability of the corporation depots to compete successfully, the government as owner of the corporation would incur the cost of closing some depots.

Any estimate of how long it would be before this option generated savings is necessarily uncertain. Nonetheless, cumulative savings after six years might amount to roughly $400 million, rising to over $3 billion after 10 years. Those estimates assume that DoD will reduce the percentage of total workload assigned to the corporation depots on a sole-source basis from 70 percent to 30 percent over a six-year period and that the depots, operating like private firms, will compete successfully for one-half of the workload that they previously received on a sole-source basis. The estimates of savings take into account the cost of closing depots that prove unable to compete.

This option has many of the same advantages and disadvantages as other alternatives for privatizing maintenance work. One disadvantage is that costs are certain and occur up front whereas savings, although potentially very large, are uncertain and occur later on. Another disadvantage is having to rely on contractual relationships rather than direct authority, particularly in a national emergency when needs might be sudden and unforeseeable. Greater use of contractors might also weaken the close relationship between the people who operate equipment and those who maintain it.

This option has one potential advantage over other approaches to privatization. Using a government corporation as a transition tool might offer current depot employees a fairer opportunity to compete for their jobs than would other alternatives that shifted the workload to the private sector. The experience of other nations in privatizing public facilities indicates that a transition period that allows public facilities to establish a track record in business opera-

tions makes them much more attractive to potential private owners.

That advantage entails some costs and risks. The corporation's initial contracts from DoD might enable it to delay closing some facilities that are unlikely to ever become cost-effective operations. Taxpayers would ultimately bear the cost associated with such a delay as well as the administrative costs incurred in setting up a government corporation. In addition, if this option was not carefully implemented, the government corporation might be used as a tool for preserving the current depot structure rather than as a means for introducing competition and paving the way for private ownership. This option would probably be most attractive to people who feel that private maintenance offers significant advantages over public maintenance but who question DoD's ability to increase its use of the private sector unless it makes some provision for its current facilities.

DEF-45 REDUCE STATE DEPARTMENT FUNDING AND ELIMINATE MISCELLANEOUS FOREIGN AFFAIRS ACTIVITIES

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	60	90	110	125	65	0	450
Outlays	50	80	100	115	75	20	440
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	125	220	310	400	415	425	1,895
Outlays	100	190	275	365	395	415	1,740

The Department of State, which employs about 22,000 full-time personnel in the United States and in foreign countries, promotes U.S. foreign policy interests abroad. Other, smaller agencies also conduct research and activities relating to foreign affairs.

The State Department will receive about $2.4 billion in 1996 to administer its foreign affairs programs. In the early 1980s, that portion of the State Department's budget was approximately $1.7 billion. Inflation was responsible for some of the increase, but the funding that was added to provide security for diplomats and to establish new posts in the republics of the former Soviet Union also contributed. Even when funding for added security and new posts is excluded, however, real growth from the 1980s through 1996 amounts to about 20 percent. The increases in funding mainly reflect growth in salaries and related expenses and in rental and acquisition costs of residences and office space. In addition, the State Department has used fees on machine-readable visas to augment its consular affairs budget. The fees for those visas are an offsetting collection and earn the State Department an estimated $80 million annually.

The State Department is not the only federally funded organization that works on foreign affairs activities. Smaller agencies such as the U.S. Institute of Peace, the Asia Foundation, the East/West Center, and the North/South Center perform functions that could be eliminated without directly affecting U.S. foreign policy. Those agencies, which have combined budgets totaling about $26 million annually, conduct research and work to build better relations between the United States and various foreign countries.

This option would reduce State Department funding from 1997 through 2002 by phasing in nominal cuts in appropriations. By 2000, State Department funding (excluding the cost of security improvements and new posts in the former Soviet Union) would return to its real level of the early 1980s. Compared with the 1996 funding level, this option would save $450 million over the 1997-2002 period--$295 million by reducing State Department funding and $155 million by eliminating the related functions of various other agencies dealing in foreign affairs. Compared with the 1996 funding level adjusted for inflation, this option would save about $1.9 billion over the six-year period.

The department could accommodate those cuts by readdressing its mission and implementing a policy of comprehensive change. Some of those changes might include eliminating or consolidating posts in less important areas of the world, reorganizing the State Department's bureaucracy, and reducing the number of senior foreign service officers, which some studies have suggested is too high given the size of the foreign service.

The State Department's Office of the Inspector General (OIG) has outlined several specific recommendations for achieving savings. An OIG audit of the Diplomatic Security Field Office Operations indicated that the efficiency of that office could be improved by more carefully screening cases of passport fraud, eliminating approximately 100 special agent positions at field and resident offices, and ending nonessential security services. In addition, changing overseas allowance rates could yield savings of nearly $10 million a year. Those changes would make the State Department more efficient and able to operate at the lower funding level.

Opponents of this option would argue that more money--not less--will be needed to handle the new, complex issues that the United States now faces abroad. The current number of senior foreign service officers may be needed to represent the United States in the post-Cold War world in which economic superpowers will compete. Finally, the smaller agencies dealing in foreign affairs might be viewed as providing valuable independent analysis of issues and improving the United States' understanding of, or relations with, foreign countries.

DEF-46 ELIMINATE OVERSEAS BROADCASTING

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			From the 1996 Funding Level				
Budget Authority	26	159	383	383	383	383	1,717
Outlays	6	127	344	380	381	381	1,619
			From the 1996 Funding Level Adjusted for Inflation				
Budget Authority	40	187	425	440	455	469	2,016
Outlays	17	152	382	433	449	464	1,897

U.S. overseas broadcasting is provided by several entities. Radio Free Europe (RFE) and Radio Liberty (RL) broadcast country-specific news to Eastern Europe and the former Soviet Union, respectively. The Voice of America (VOA) oversees radio broadcasts that provide news and U.S.-related information to audiences worldwide. The United States Information Agency (USIA) oversees television broadcasting services similar to the radio broadcasts of VOA and also manages a broadcasting service to Cuba. Earlier this year, the Congress consolidated the appropriations for VOA, RFE/RL, and USIA's television and film service into the International Broadcasting Operations account. Funding for radio and television broadcasting to Cuba and for construction of broadcasting facilities was provided in separate appropriations.

This option would eliminate VOA and RFE/RL and would end broadcasting services to Cuba, all overseas construction of broadcast facilities, and U.S. overseas television broadcasting. When measured against the 1996 funding level, six-year savings would total $1.7 billion. Terminating International Broadcasting Operations, which has an operating budget of $329 million, would cost about $341 million in 1997 but would yield six-year savings of about $1.4 billion. Over the six-year period, ending broadcasts to Cuba would save about $134 million, and terminating construction of broadcast facilities, $174 million. Near-term savings for those programs would be reduced by large termination costs, such as severance pay for employees. Compared with the 1996 funding level adjusted for inflation, this option would save approximately $2 billion over the six-year period.

Proponents of terminating overseas broadcasting claim that RFE/RL and VOA are relics of the Cold War that are no longer necessary. RFE and RL continue to broadcast to countries of Eastern Europe and the former Soviet Union even though, after the fall of communism, those countries have ready access to world news. With the advent of satellite television broadcasting, most nations can receive world and U.S.-related news from private broadcasters, such as the Cable News Network (CNN). Some proponents also argue that the primary technology used by VOA and RFE/RL limits the effectiveness of U.S. overseas broadcasting; because shortwave radios are needed to receive most broadcasts, audiences are limited. Finally, foreigners may distrust the accuracy of broadcasts sponsored by the U.S. government.

Critics of this option would argue that the current level of broadcasting should continue or even increase. The process of change in Eastern Europe and the former Soviet Union needs nurturing, and U.S. broadcasting can assist in that process. In other parts of the world, many countries remain closed. Supporters of VOA and RFE/RL argue that shortwave radio broadcasts are the best way to reach people in closed countries because very few people own satellite dishes, which are needed to receive television

broadcasts such as those by CNN. They note that VOA and RFE/RL are continuing to broadcast more programs over AM and FM frequencies. Supporters also argue that broadcasting should be sharply increased to some countries such as China and North Korea. Further, they believe that television is a powerful communications tool and that private television networks cannot adequately communicate U.S. policy and viewpoints.

DEF-47 RECOVER THE FULL COST OF MILITARY EXPORTS

	Annual Added Receipts (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Receipts	90	105	150	160	165	165	835

The United States now exports more military equipment and services than any other country, a position held by the former Soviet Union during the 1980s. Since the end of the Cold War, the international market for military equipment and services has fallen precipitously, by about 70 percent. In contrast, U.S. exports have fallen by less than 25 percent, from approximately $13 billion a year in the 1980s to between $9 billion and $10 billion in the mid-1990s. The Department of Defense expects that relatively strong performance to continue, with U.S. defense industries capturing between 50 percent and 60 percent of the global arms trade. Economic concerns rather than Cold War competition have now become the primary motivation for arms sales, and with the end of the Cold War, the need for the U.S. government to subsidize global alliances has greatly diminished. Indeed, Russia has terminated most of its grant agreements and now pursues arms exports as a means of earning hard currencies.

This option would reinstate a policy of full cost recovery to U.S. foreign military sales programs by reversing recent changes in U.S. laws and regulations that created the subsidies. If the government recovered the full cost of arms sales, its additional receipts would be $90 million in 1997 and $835 million over six years. That estimate assumes that the amount of new arms sales agreements will remain relatively low through the decade as importing countries focus on sustaining existing weapon systems. Subsidies are estimated to have little effect on such sales.

Specifically, this option would eliminate several different subsidies now provided for foreign arms sales. All sales would again be subject to charges for nonrecurring research, development, and production on licensed commercial exports of major defense equipment and for the use of U.S. government-supplied plant and production equipment. That would recoup some of the U.S. government's investment. In addition, the option would require that the administrative surcharge currently imposed on all arms sales include the full cost of civilian and military personnel who work on foreign military sales.

Proponents of subsidizing military exports argue that the exports forge important ties between the United States and foreign military leaders. They also contend that other countries' having U.S. equipment will facilitate joint operations involving U.S. and foreign forces. They argue that significant increases in the cost of military exports, which are also an important source of business and employment for defense industries, will adversely affect the U.S. defense industrial base. Advocates of arms sales claim that each billion dollars of exports supports 20,000 to 25,000 jobs in defense industries.

Opponents counter that concerns about the proliferation of weapons outweigh the benefits of protecting the U.S. defense industrial base. They argue that no economic studies have shown that demand for military equipment would be sensitive to the modest price increases proposed in the option. They contend that military exports can harm importing countries by contributing to destabilizing regional arms races, increasing the destructiveness and violence of regional wars, and draining resources away from civilian investment.

U.S. defense industries have significant advantages over their foreign competitors and thus should not need additional subsidies to attract sales. Because the U.S. defense procurement budget is nearly twice that of all Western European countries combined, U.S. industries can realize economies of scale not available to their competitors. The U.S. defense

research and development budget is five times that of all Western European countries combined, which ensures that U.S. weapon systems are and will remain technologically superior to those of other suppliers. The military and political ties with the United States associated with the sales are also an important benefit to many foreign countries. In times of crisis, no other country can offer the same military or logistical assistance as the United States.

DEF-48 REDUCE SECURITY ASSISTANCE

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	178	282	555	824	1,090	1,357	4,287
Outlays	124	217	415	687	957	1,226	3,625
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	238	403	755	1,115	1,487	1,878	5,877
Outlays	166	308	570	925	1,292	1,677	4,939

International security assistance consists primarily of aid from the Economic Support Fund (ESF) and the Foreign Military Financing (FMF) program. Two countries--Israel and Egypt--receive most of that funding. In 1979, Israel and Egypt signed the Camp David peace accords that formally ended 30 years of hostilities. As part of that process, the United States agreed to provide substantial amounts of aid to both countries to promote their economic, political, and military security. In 1996, funding for security assistance to Israel and Egypt totaled $5.2 billion. Assistance earmarked for them now accounts for 88 percent of discretionary funding for security assistance and 28 percent of all discretionary funding for international affairs. With that total being cut severely, it seems appropriate to have those two countries assume some of the burden of reductions in the international affairs budget.

This option would reduce economic and FMF support to both Israel and Egypt. It would set economic support for Israel, in return for its continued participation in the Camp David Accords, at the amount of its annual repayment of security assistance loans and guarantees. The Congress has consistently stated in appropriation law that Israel should receive sufficient funding to repay many of its debts to the U.S. government. By historical practice, U.S. assistance to Egypt has been tied politically to its assistance to Israel. Thus, the option would make proportionate reductions in Egypt's allocation. Relative to the 1996 funding level, the six-year savings from those reductions in economic support to Israel and Egypt would be $2.2 billion. Relative to the 1996 level adjusted for inflation, the savings would be $3.5 billion.

This option would also reduce the level of grants to Israel and Egypt for FMF assistance. Israel would receive $1.8 billion in grants in 1996. Beginning in 1999, $475 billion in FMF grants to Israel would be phased out over a four-year period. Those reductions, plus proportionate reductions in Egypt's grants, would save $2 billion over six years compared with the 1996 funding level. With the 1996 level adjusted for inflation, the savings would be $2.4 billion.

Many people feel that Israel no longer needs the economic support it receives from the United States. That support helps to offset Israel's balance-of-payments problems, which stem mainly from a high trade deficit with Europe rather than with the United States. U.S. economic aid to Israel represents less than 2 percent of Israel's gross domestic product (GDP). Moreover, proponents of cutting aid would argue that Israel is a high-income economy by World Bank standards and thus should be able to weather these cuts.

According to some analysts, U.S. assistance to Egypt is not being spent wisely or efficiently. Critics note that high levels of appropriations have exceeded Egypt's ability to spend the funds, leading to the accumulation of large undisbursed balances, inefficient

use of assistance, and delays in making the reforms needed to foster self-sustaining growth. Furthermore, many other countries and organizations contribute substantial amounts of money to Egypt. Thus, some reductions in U.S. assistance may make sense.

Proponents of cutting military assistance to Israel and Egypt believe that those countries no longer need a high level of support. With the expanding peace process in the Middle East and Iraq's defeat in the Persian Gulf War, neither Israel nor Egypt faces a substantial military threat in the near future. After 15 years of U.S. arms sales and grants, Israel and Egypt are far better equipped militarily than any of their neighbors. Roughly one-quarter of Israel's grants for 1996, or the $475 million noted above, is designated for procuring defense articles, services, and research and development in Israel. That funding therefore results in further balance-of-payments support for Israel's trade deficit.

Furthermore, both Israel and Egypt have reduced the burden of defense on their respective economies. Israel now spends approximately 10 percent of its GDP on defense, down from 23 percent in the early 1980s. Similarly, the defense burden on Egypt's economy has declined from more than 7 percent of GDP in the mid-1980s to slightly more than 3 percent in the 1990s. Those declines may reflect both the economic growth in Israel and Egypt over the past 10 years and an improving security environment.

Supporters of current aid levels would argue that Israel and Egypt are the United States' closest allies in the Middle East. Cutting foreign assistance to them at this time could be interpreted by some people in the Middle East as a weakening of U.S. political support for either those two states or the Middle East peace process, especially given the assassination of Israeli Prime Minister Yitzak Rabin in November 1995. Furthermore, both Israel and Egypt face domestic and international threats from Islamic fundamentalists and states supporting terrorism, such as Iran. Many groups in the Arab world violently oppose both states for having started the peace process in 1979. Thus, supporters of maintaining current levels of assistance would argue that even though cuts may eventually be warranted, now is not the time to make them. A weakening of U.S. support might jeopardize Israel's security and Egypt's stability.

DEF-49 ELIMINATE P.L. 480 TITLE I SALES AND TITLE III GRANTS

	Annual Savings (Millions of dollars)						Six-Year Cumulative
	1997	1998	1999	2000	2001	2002	Total
			From the 1996 Funding Level				
Budget Authority	313	313	313	313	313	313	1,878
Outlays	172	297	313	313	313	313	1,721
			From the 1996 Funding Level Adjusted for Inflation				
Budget Authority	322	332	341	351	360	371	2,077
Outlays	177	311	336	346	355	365	1,892

The Agricultural Trade Development and Assistance Act of 1954 (Public Law 480) was enacted during a period when the inconvertibility of foreign currencies and the lack of foreign exchange held by potential customers limited commercial exports of large domestic surpluses of agricultural commodities. Sales for foreign currencies, concessional credit, and grants provided a mechanism for developing markets, disposing of surplus commodities, and furthering U.S. foreign policy interests.

Changes in the world over the past 40 years may have rendered the program obsolete, however, and it may now be an inefficient means of achieving those objectives. This option would eliminate sales under title I of the act and grants under title III beginning in 1997. That would reduce the federal budget by $313 million in 1997 and $1.9 billion through 2002 relative to the 1996 funding level. Savings would be $322 million in 1997 and $2.1 billion through 2002 relative to the 1996 funding level adjusted for inflation. Humanitarian and emergency feeding programs are funded under title II of P.L. 480 and under section 416 of the Agricultural Act of 1949 and would not be affected by this option.

The market development aspect of the P.L. 480 program is relatively insignificant for two reasons: exports under titles I and III are a small portion of total U.S. agricultural exports, and the countries currently receiving P.L. 480 commodities are unlikely to become commercial customers. In 1956 through 1965, the P.L. 480 program financed between one-quarter and one-third of all agricultural exports. Since the mid-1960s, the value and tonnage of shipments under titles I and III have declined as commercial exports have grown. In fiscal year 1995, those shipments represented less than 1 percent of the $54 billion in total agricultural exports. U.S. security or foreign policy interests largely determine which countries receive commodities under titles I and III. If market development remains an objective of U.S. policy, it should focus on countries that are likely to become commercial customers in the near term. Other programs such as the Commodity Credit Corporation's short- and intermediate-term credits and the Export Enhancement Program are designed to protect old markets and to penetrate new markets at lower cost to the U.S. government.

Disposing of surpluses is no longer a primary concern of the program. The government no longer holds stocks of most of the commodities shipped under P.L. 480. Booming demand and crop yields reduced by inclement weather have eliminated surplus stocks, and any future surpluses will be managed instead through the Acreage Reduction Program. This option would terminate title I and title III shipments after the 1996 crop year. The delay would permit the Department of Agriculture to lower production through an increased acreage set-aside if demand was expected to fall in any future year, thus preventing a buildup of surpluses or effects on the budget.

Providing assistance to developing countries through P.L. 480 is not always an efficient use of U.S. resources. Many of the U.S. agricultural commodities that foreign countries buy with P.L. 480 assistance are resold to generate local currency. Those funds are used in turn to support local budgets and local development. But the inexpensive food may discourage local investment in agriculture, lower rural employment and income, and discourage the development of local stockpiles. If one or more of those effects occurs, the United States has hindered local development.

In some cases, the terms of credit granted under title I may actually harm the economies of the countries that receive the credits. Those credits have maturities as long as 30 years, and thus the obligation for repayment remains long after the item purchased has been consumed.

These drawbacks notwithstanding, titles I and III of P.L. 480 also have their supporters, who argue that the programs are a flexible, fast means of providing assistance to friendly countries. They also point out that the programs reduce the likelihood that surpluses of agricultural commodities will depress prices within the United States and that the programs offer some humanitarian benefits: agricultural products are shipped, and hungry people are fed.

Chapter Four

Domestic Discretionary Spending

Domestic discretionary programs include all federal programs controlled through appropriations except those in defense and international affairs.[1] An extremely varied category results, comprising the areas of science and space, transportation, energy, agriculture, environmental protection, housing, education and training, medical research, and law enforcement (see Box 4-1). The agencies that receive significant funding from domestic discretionary appropriations are among the most visible in government; they include the Departments of Agriculture, Education, Energy, Health and Human Services, Housing and Urban Development, and Justice, as well as the Environmental Protection Agency and the National Aeronautics and Space Administration. Many of the programs and activities funded under the domestic discretionary category are also prominent and, in many cases, popular. Some examples are the space station and space shuttle, Superfund, support for U.S. farm exports, small business loans, aid to Amtrak and mass transit, support for elementary and secondary education, the National Cancer Institute, and various programs to control illegal drugs.

Recent Developments and Trends

Spending for domestic discretionary programs in 1996 will dip to an estimated $252 billion, or about 16 percent of federal outlays. Outlays for each of three budget functions--transportation (400), education, training, employment, and social services (500), and income security (600)--will exceed $35 billion in 1996 and, taken together, account for about 45 percent of the total (see Table 4-1). Cutting across budget functions, pay for the federal workforce will make up about 25 percent of total discretionary spending for domestic programs, and aid to state and local governments will account for 35 percent.

The 1996 level of spending for domestic discretionary programs represents a $0.4 billion decrease from spending for the same purposes in 1995. Although small, that drop was the first since 1987 and reversed the mild upward trend beginning in the late 1980s in the percentage of gross domestic product (GDP) accounted for by such spending (see Figure 4-1). Adjusted for inflation, 1996 discretionary spending for domestic programs fell by 2.9 percent from the 1995 level. The spending level in the budget resolution for 1997 would increase spending for the category in that year but would lower it thereafter to $230 billion by 2002.

The spending path for domestic discretionary programs in the budget resolution is consistent with the path established during the protracted effort to achieve a budget agreement for 1996. The search for agreement produced more budget plans than usual; they included the President's budget for 1996, the budget resolution of June 1996, the President's revised proposals offered in July 1995 in the *Mid-Session Review of the 1996 Budget,* the Balanced Budget Act of 1995 (passed by the Congress in November 1995), and yet another plan from the Administration on January 6, 1996, that subsequently be-

1. The discretionary spending limits for the Violent Crime Reduction Trust Fund are included in the domestic discretionary total for the purposes of this discussion.

Box 4-1.
Categories of Domestic Discretionary Spending

250 General Science, Space, and Technology--Research supported by the National Science Foundation, the bulk of the spending by the National Aeronautics and Space Administration, and the general science research supported by the Department of Energy.

270 Energy--Domestic energy programs of the Department of Energy and activities of the Rural Utilities Service and the Nuclear Regulatory Commission, including programs to increase the supply of energy, encourage energy conservation, provide an emergency stockpile of energy, and regulate energy production.

300 Natural Resources and Environment--Programs administered by the Army Corps of Engineers, the Department of Agriculture, the Department of the Interior, the Environmental Protection Agency, and the Department of Commerce's National Oceanic and Atmospheric Administration, among others, for water resources, conservation and land management, pollution control, and other natural resources programs.

350 Agriculture--Programs administered by the Department of Agriculture to promote economic stability in agriculture and increase agricultural output. Farm income stabilization--loans, subsidies, and other payments to farmers--and agricultural research are funded under this function.

370 Commerce and Housing Credit--Funding for the regulation and promotion of commerce and the housing credit and deposit insurance industries. Also included in this category are subsidies to the Postal Service, programs providing loans and other aid to small businesses, and support for the government's efforts to gather and disseminate economic and demographic data.

400 Transportation--Most of the programs of the Department of Transportation and the National Aeronautics and Space Administration's support for aeronautical research, including funding to aid and regulate ground, air, and water transportation. Among the prominent programs supported under this function are grants to states for highways and airports and federal subsidies to Amtrak.

450 Community and Regional Development--Programs that support the development of physical and financial infrastructure intended to promote viable community economies, including activities of the Department of Commerce and the Department of Housing and Urban Development. This function also includes expenditures to help communities and families recover from natural disasters and supports the rural development activities of the Department of Agriculture, the Bureau of Indian Affairs, and other agencies.

500 Education, Training, Employment, and Social Services--Funding for a diverse group of education and training programs extending from the preschool level (the Head Start program, for example) to elementary and secondary education (grants to states, for instance) to postsecondary education and vocational training. Most of the programs included in this category are administered by the Departments of Labor and Education.

550 Health--Research (in the form of grants, largely to universities) supported by the Department of Health and Human Services through the National Institutes of Health, and programs funded by several different federal agencies to promote food and drug safety, consumer product safety, and occupational safety.

570 Medicare--The administrative expenses of the program, which are classified as discretionary. (Medicare provides health care services to people age 65 and older and to disabled beneficiaries.)

600 Income Security--Housing assistance, administered by the Department of Housing and Urban Development, and other major discretionary programs including assistance to needy individuals for food and energy.

700 Veterans Benefits and Services--Funding for veterans' hospitals and the construction of veterans' health care facilities.

750 Administration of Justice--Programs that provide judicial services, law enforcement, and prison operation. The Federal Bureau of Investigation, the Customs Service, the Drug Enforcement Administration, and the federal court system are all supported under this function.

800 General Government--Funding for the central management and policy responsibilities of both the legislative and executive branches of the federal government. The bulk of the expenditures in this category cover legislative functions and central fiscal operations, including those of the General Services Administration and the Internal Revenue Service.

SOURCE: General Accounting Office, *A Glossary of Terms Used in the Federal Budget Process,* GAO/AFMD-2.1.1 (January 1993), pp. 103-126.

came the President's budget proposal for 1997. Taken together, those plans and the budget resolution adopted by the Congress for 1997 illustrate several basic truths about the contribution that cuts in domestic discretionary spending make to reducing the overall deficit.

The pressure to bring down the deficit is likely to limit the growth of discretionary spending for domestic programs for the next several years. Many architects of budget plans begin by freezing such spending. (Accordingly, for most deficit reduction options in this volume, the Congressional Budget Office provides estimates of annual and total six-year savings measured from both the 1996 level of budget authority and the 1996 level adjusted for inflation.) In addition, policymakers are scrutinizing many of the programs in the domestic discretionary category to decide whether to modify or eliminate them. That examination is taking place in the light of a general reconsideration of the appropriate role of the federal government and the desire to shrink the size of the federal government.

Balancing the budget in 2002, as opposed to merely making substantial progress toward lowering the deficit, could reduce discretionary spending for domestic programs below the 1996 level. Most recently, the 1997 budget resolution outlined a plan for achieving balance that would leave domestic discretionary spending $21 billion below the 1996 level in 2002. The plan would allow a small increase in discretionary spending for defense programs of about $5 billion over six years. The budget resolution for 1996 made a similar "guns versus butter" trade-off. Both plans represent departures from the trend of recent years, which favored domestic discretionary spending over defense spending. The President's plan to balance the budget reduces total spending for discretionary programs in 2002 to a level that is

Table 4-1.
Budget Authority and Outlays for Domestic Discretionary Programs, by Budget Function, Fiscal Year 1996
(In billions of dollars)

Budget Function	Budget Authority	Outlays
General Science, Space, and Technology (250)	16.7	16.5
Energy (270)	4.8	5.8
Natural Resources and Environment (300)	20.5	21.3
Agriculture (350)	3.9	4.0
Commerce and Housing Credit (370)	1.8	1.9
Transportation (400)	13.8	36.5
Community and Regional Development (450)	10.5	10.7
Education, Training, Employment, and Social Services (500)	36.2	38.8
Health (550)	23.3	23.1
Medicare (570)	3.0	3.0
Income Security (600)	27.5	38.7
Social Security (650)	0	3.1
Veterans Benefits and Services (700)	18.4	19.0
Administration of Justice (750)	20.6	17.3
General Government (800)	11.6	11.7
Total	212.6	251.7

SOURCE: Congressional Budget Office.

$6 billion below spending in 1996. In the final analysis, that plan could also reduce spending for domestic discretionary programs below the current level because it does not fully specify how the spending reductions needed to balance the budget would be divided among the categories of discretionary programs.

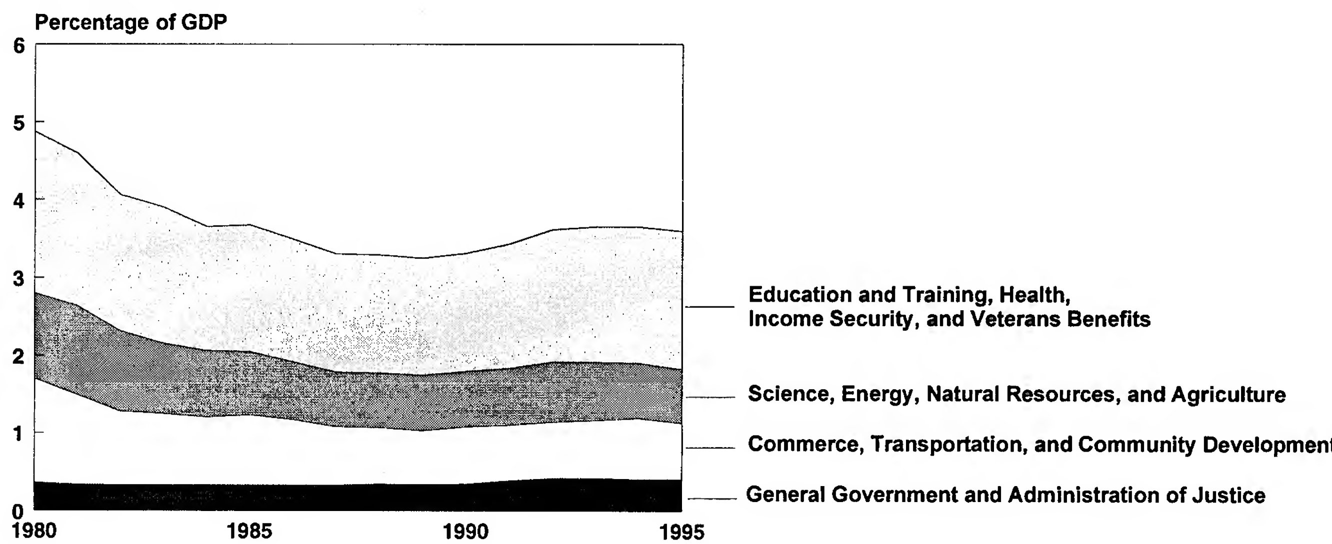
The many budget plans considered by the Congress over the past 19 months also demonstrate, however, that the budget is unlikely to be balanced in 2002 through reductions in domestic discretionary spending alone. The Balanced Budget Act of 1995 is illustrative. Reducing discretionary spending for domestic programs by about $120 billion from the 1995 level over the 1996-2002 period only accounted for a third of the spending cuts necessary to balance the budget by 2002. The remaining two-thirds of the reductions came from proposed cuts in mandatory spending and lower interest costs. CBO's most recent budgetary projections show that even under the most favorable economic outlook (the lower interest rates and slightly stronger growth that could be expected if the budget was balanced) and under the assumption that current mandatory spending and revenue policies remain in place, a freeze in total discretionary spending at the 1996 level would still leave a deficit of $106 billion in 2002. As Chapters 5 through 7 discuss, the key to eliminating the deficit in the future will be to reduce spending for entitlement programs.

Finally, and of particular significance to the purpose of this volume, none of the budget plans that have recently been proposed and considered include all of the specifics necessary to achieve their deficit reduction goals. The program-level reductions presented in this chapter are among the options that the Congress will examine in trying to refine those plans. In keeping with its mandate to provide objective, impartial analysis, CBO does not recommend any of the specific options to reduce domestic discretionary spending.

Rationales For and Against Spending Reductions

The attempt to balance the budget by 2002 has led to proposals to eliminate agencies, entire programs, and the federal role in certain areas of activity. But the aggressiveness of some current proposals should not obscure the constancy over the years in the general

Figure 4-1.
Domestic Discretionary Spending as a Share of GDP (By fiscal year)



SOURCE: Congressional Budget Office.

rationales offered for reducing discretionary spending for domestic programs, nor in the arguments for maintaining current programs and spending.

Three general rationales for cutting federal spending for such programs stand out in the present environment. First, federal outlays could be reduced when programs are found to be ineffective or inefficient in meeting their objectives. For instance, the argument that past spending has been ineffective in achieving program goals is offered to support DOM-42, an option that would eliminate or reduce expenditures on education for the disadvantaged. Second, federal spending could be scaled back for programs that have accomplished their original mission, a point made in the case for eliminating the credit subsidies provided by the Rural Utilities Service (see DOM-10). Third, federal spending could be pared down by eliminating programs that benefit local areas, industries, firms, or groups of consumers but that do not deliver benefits beyond the directly affected group. The argument for DOM-31, an option to end the Essential Air Service program, is an example of that position; it asserts that programs that generate primarily local benefits ought to be locally funded. DOM-32, an option to eliminate applied research and development support for the producers of commercial aircraft, illustrates the case to be made for cutting a program when the federal government pays for research that produces benefits that could, for the most part, be captured by directly affected private businesses making comparable investments.

At the heart of the third major rationale supporting many options that would reduce domestic discretionary spending is a negative answer to the question, "Is this an appropriate activity for the federal government?" As such, that long-standing basis for eliminating a federal activity and reducing spending joins with currently popular ideas about reinventing, privatizing, or scaling back the federal government. It is also the other side of the budgetary coin that led to the passage of the Unfunded Mandates Reform Act of 1995. The reexamination of federalism occurring in the discussions of unfunded mandates and their impact on states, localities, and the private sector would be incomplete if it did not consider the prospect of decreasing the flow of federal funds to programs and activities that deliver primarily local benefits or that produce benefits that could be secured by private investors pursuing the highest returns on their investments.

Balancing the general arguments for specific spending reductions are equally general defenses of current programs and expenditures. The supporters of activities that are criticized as outmoded, ineffective, or unlikely to produce benefits large enough to justify their costs sometimes simply reject those characterizations. (For example, advocates of continued spending for the international space station, which is discussed in DOM-01, argue that the benefits from the facility far exceed its costs.)

In other cases, advocates of spending that directly benefits a specific area, group, or industry contend that the benefits also accrue indirectly to the nation at large. According to those proponents, spending that supports a specific industry--for example, the research and development spending questioned in DOM-05 and DOM-07--may, from society's point of view, compensate for inadequate market signals that would lead private investors to invest too little in such activities. Similar claims of benefits beyond those granted to direct recipients of funds are offered in support of programs that raise health, education, or housing standards for a particular locality or group to meet a national goal. Reductions in those programs will generally fall most heavily on current recipients who have little or no ability to adjust--poor, elderly, or disabled people. In those cases, the appropriateness of the federal government's role is as likely to be offered as an argument for an expenditure as against it.

Process and Presentation

Because all of the options in this chapter would affect discretionary spending, achieving the budgetary savings they offer would require legislation in the form of appropriation acts. In some cases, however, the options describe changes in the laws authorizing the programs in addition to reductions in the amounts appropriated for them. Options that propose alterations in authorizing legislation would change the goals of a program or the methods of achieving them. An example of such an option is DOM-14, which

would eliminate the Superfund program. The effect of the program change combined with reduced appropriations would be different from the effect of cuts in appropriations alone.

The text accompanying each option describes the option's programmatic changes and their effects, and arguments for and against the changes. The estimated savings for most of the options in this chapter are presented as reductions from both the 1996 funding level held constant from 1997 through 2002 and the 1996 funding level adjusted for inflation over the same period. An exception is DOM-66, which estimates spending reductions from projections that incorporate assumptions about expected employment levels and include scheduled adjustments for inflation spelled out in the Federal Employees Pay Comparability Act of 1990. Other exceptions are noted as necessary in individual options.

Estimates of savings from the 1996 funding level held constant from 1997 through 2002 are included in this volume in response to concerns expressed in the Congress about the usefulness of budget projections that have been adjusted for inflation. Critics point out that calculating spending reductions from such projections could lead to a claim of savings credited to a program that continues to enjoy increased funding in nominal terms. Conversely, a spending freeze carries with it an appearance of maintaining the status quo when it is actually delivering less as prices rise. Programs in the domestic discretionary area would have to be adjusted, diminished, or made to work more efficiently to fit within constant funding at the 1996 level from 1997 through 2002. With discretionary spending for domestic programs frozen at the 1996 level through 2002, projections show that the real resources allocated for those purposes would decrease by about 15 percent. Even the most optimistic advocates of the power of budget tightening to induce gains in efficiency would be likely to concede that budgets frozen for an extended period of time ultimately buy less.

Care should be taken in constructing a deficit reduction plan to match estimates of savings with the correct corresponding overall budget projection--that is, the total projection for all spending figured from either the adjusted or unadjusted 1996 level. For example, subtracting savings calculated against an inflation-adjusted baseline from a projection of overall spending that freezes discretionary spending at the 1996 level would overstate the savings associated with the reduction because the frozen level has not taken inflation into account to begin with.

DOM-01 CANCEL THE INTERNATIONAL SPACE STATION PROGRAM

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	1,444	2,144	2,144	2,144	2,144	2,144	12,164
Outlays	892	1,817	2,110	2,139	2,143	2,144	11,245
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	1,508	2,272	2,337	2,401	2,467	2,538	13,523
Outlays	932	1,918	2,275	2,369	2,438	2,508	12,440

Canceling the international space station program would reduce outlays by $892 million in 1997 and by $11.2 billion over the 1997-2002 period measured against the 1996 funding level. Measured against the 1996 funding level adjusted for inflation, savings would be $932 million in 1997 and $12.4 billion from 1997 through 2002. Both sets of estimates recognize termination costs of about $700 million in 1997.

The international space station program almost achieved a second consecutive year of stability in 1995. During most of the year, program managers and outside observers pointed to progress in building hardware and in finalizing agreements between the National Aeronautics and Space Administration (NASA) and its private contractors, and between the United States and its international partners. In late 1995, however, Russia indicated that it could not meet its commitment to supply hardware for the space station without additional funding from the United States. In early 1996, a new agreement was reached: Russia will deliver critical hardware as planned, and the United States will assume what was previously Russia's responsibility for launching some parts of the space station and bear some additional, unspecified costs for modifying a Russian space vehicle to serve as a "lifeboat" for the space station crew in the event of an emergency.

Some observers have cautioned that financial problems arising from Russia's participation in the program are likely to persist. If so, the United States will be faced with the choice of increasing its own funding for the space station (either to cover the shortfall in Russian funding or to build the components domestically), delaying the program further, or abandoning it completely. But compared with the past, the program's costs and schedule are more certain. Even in a worst-case scenario in which the partnership with Russia was ended, costs would increase by no more than $2 billion (NASA's estimate of the "savings" associated with Russia's participation), and the program schedule might slip by only a year or two.

Significant progress toward the launch, deployment, and operation of the space station weakens the case for cancellation on the basis of the uncertainty and unpredictability that have at times characterized the effort. But fundamental arguments against retaining the program are unchanged. NASA's progress toward completion and its sunk costs of $15.0 billion notwithstanding, the opponents of continuing the program question whether its future benefits are sufficiently large to justify the costs of completing and operating the facility. By the most optimistic reckoning, the international space station program will require an additional $11.1 billion through its development phase, which ends in 2002, and another $22 billion for operating costs through 2012.

In support of their position, critics cite the general lack of enthusiasm for the space station among

individual scientists and scientific societies. The program's opponents also note that the costs of the program have continually increased, although its capabilities and scope of activities have decreased. Moreover, opponents hold that under the President's 1997 budget plan, any overruns that occurred would be paid for through additional cuts in NASA's science, technology, and aeronautical activities--areas already projected to receive less funding through 2001. Finally, critics point to the uncertainty surrounding the costs of operating and supporting the facility once it has been developed and launched. On that score, opponents are skeptical of NASA's assurance that the station's operating costs will be low, noting that the agency made similar claims about the space shuttle that proved overly optimistic.

Advocates of continued spending for the space station program emphasize its positive effects on employment in the aerospace industry. Supporters also argue that the participation of Russia has strengthened the foreign policy reason for continuing the program. They assert that drawing Russia, and particularly its aerospace industry, into a cooperative venture will help to stabilize the Russian economy and provide incentives for Russia to adhere to international agreements concerning the spread of missile technology. Supporters of the space station further note the long-standing arguments about the value of the project as a laboratory in orbit with unknown but positive scientific potential and as a test bed to learn how people in space live and work, in anticipation of future piloted exploration of the solar system. Advocates point out as well that the project's cancellation would force the United States to renege on agreements signed with European nations, Japan, and Canada. That withdrawal could hurt the prospects for future international cooperative agreements on space, science, and other areas of mutual interest.

DOM-02 SCALE BACK AND DELAY NASA'S EARTH OBSERVATION SYSTEM

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			From the 1996 Funding Level				
Budget Authority	128	156	197	231	175	117	1,004
Outlays	57	115	165	202	197	159	895
			From the 1996 Funding Level Adjusted for Inflation				
Budget Authority	151	203	267	324	292	260	1,497
Outlays	68	144	217	277	296	282	1,284

The Earth Observation System (EOS) is the centerpiece of the National Aeronautics and Space Administration's (NASA's) participation in the multiagency Global Change Research Program. The current plan for EOS envisions many satellites launched over a number of years and a massive data information system. The first EOS satellite is scheduled for launch in the late 1990s. Scaling back and delaying parts of the system could reduce spending by $57 million in 1997 and by $895 million from 1997 through 2002 measured against the 1996 funding level, and by $68 million in 1997 and $1.3 billion from 1997 through 2002 measured against the 1996 level adjusted for inflation.

The purpose of the Global Change Research Program is to improve knowledge about the natural and anthropogenic processes and forces that influence global climate over the long term. Specifically, the program focuses on global warming, ozone depletion, changes in biodiversity, forest distribution, and desertification. EOS will be the primary eyes, ears, and nervous system of the program's efforts, gathering data by satellite and making those data available to researchers through a sophisticated information storage and retrieval system.

The EOS program has gone through several planning exercises that have reduced its scope and cost. When the program began in 1989, its design consisted primarily of two large spacecraft in polar orbit carrying 30 instruments at a projected cost of $17 billion through 2000. A 1992 restructuring plan reduced the cost of the program to about $11 billion by breaking up the large spacecraft, cutting the number of instruments, and stretching out the program's life. Another restructuring in 1993 further reduced the cost of the program to $8 billion for the 1990s. Marginal adjustments in 1994, known as a "rebaselining," lowered estimated costs to $7.2 billion. Additional adjustments in 1995 have shaved another $400 million from the plan, decreasing the estimated cost of the program through 2000 to $6.8 billion.

This option lays out additional reductions in the EOS effort. In particular, it would delay the third of the program's first three major satellites, the Chemistry-1, for five years from its scheduled launch in late 2003 and cut funding for the EOS data information system (EOSDIS) by 25 percent from the levels in the current plan. Carrying out the option would delay the availability of the data that the Chemistry-1 satellite is designed to provide and limit the volume of and access to data that EOSDIS could offer.

The primary argument for further reductions in spending for EOS holds that delaying the collection and analysis of EOS data will not substantially decrease the benefits that the program is designed to deliver. Scientists do not expect EOS to generate data and analysis to support environmental policy decisions over the next decade; rather, the focus of EOS's applied and basic science is on the longer term. Thus, the loss of benefits from deploying the

Chemistry satellite in 2006 instead of in 2001 is arguably small. In a similar vein, reductions in spending for EOSDIS that limit access by researchers or slow the entry of new data may merely delay rather than deny the benefits produced by the project. A secondary argument is that the Earth Observation System as currently planned does not take full advantage of evolving small-satellite technology or the prospect that private sources, if offered the proper incentives, could provide a larger part of the data that EOS is meant to obtain.

The case for continuing with the current program plan and budget holds that EOS has been repeatedly examined and that the present program constitutes the minimum acceptable effort. Moreover, although scaling back and stretching out the project would decrease spending over the next five years, the total cost of the program would be likely to increase. In addition, because EOS is integrated with the global change research programs of other nations, adopting this option (or virtually any other that would noticeably decrease spending) could well force international commitments to be renegotiated and might call into question the reliability of the United States as a partner in large-scale scientific ventures.

DOM-03 ELIMINATE THE EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	80	80	80	80	80	80	480
Outlays	16	52	72	77	80	80	377
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	82	85	87	90	92	95	531
Outlays	16	54	76	83	89	91	409

The Experimental Program to Stimulate Competitive Research (EPSCoR) is a partnership between states and several research-oriented federal agencies, primarily the National Science Foundation (NSF) but also the Department of Defense, Department of Agriculture, Department of Energy, National Aeronautics and Space Administration, and others. Currently, those agencies spend more than $80 million on the federal portion of EPSCoR. Ending that federal contribution would save $16 million in 1997 and $377 million over the 1997-2002 period relative to the 1996 spending level. Relative to the 1996 level adjusted for inflation, the option would save $16 million in 1997 and $409 million through 2002.

EPSCoR was created in response to a concentrated distribution among the states of federal research and development (R&D) funding--a large number of states receive very little of the funding. EPSCoR was designed to encourage more investment by states in science and technology. The joint federal/state program helps the research enterprise in participating states grow in three ways: it increases the competitiveness of local research institutions in attracting external research support; it fosters the transfer of knowledge; and it improves the skills and effectiveness of scientists and engineers in those states.

Eighteen states and the Commonwealth of Puerto Rico currently take part in EPSCoR. Between 1980 and 1994, the NSF provided roughly $120 million to more than 60 colleges, universities, and laboratories that had not received significant federal R&D funding in the past. State governments, local industry, and other nonfederal sources provided an additional $300 million to those institutions. The entire effort has supported 2,000 scientists and engineers.

Opponents of EPSCoR contend that the nation must make optimal use of its limited research dollars. That principle would argue for supporting researchers whose proposals are judged superior through a process of peer review, without regard to geographical distribution. Furthermore, critics doubt whether newcomers to the research enterprise can sustain a top-level effort, which requires substantial ongoing investments by the states and regional institutions. Even with matching funds from the states and other nonfederal organizations, novice research institutions might find it difficult to succeed.

Critics also argue that EPSCoR was supposed to be an experimental program, not a permanent source of R&D support for selected states. They note that after nearly 15 years of EPSCoR support, the program's recipients continue to attract only about 7 percent of the federal funding for academic R&D. Opponents point to the corresponding lack of improvement in state shares of such funding: participating states that began the 1980s in the bottom half of the national rankings were still in the bottom half in 1993.

Advocates maintain that EPSCoR promotes a more equitable geographic distribution of the nation's science and technology base. They assert that state policymakers invest more in R&D than they would without EPSCoR's incentives and those investments promote equity in higher education by giving students in those states the research experience and training necessary for careers in scientific fields. Proponents also contend that the program fosters technology-related industries in the states by involving local firms in the selection of research topics. Supporters note that 15 of the EPSCoR states experienced above-average growth in federal funding for academic R&D over the 1980-1993 period. They claim that the EPSCoR states have improved their rankings in their chosen "niche" fields, even if such changes are not apparent in the aggregate statistics. They argue as well that the quality of EPSCoR-funded research is on a par with other federally funded R&D, because awards are based on merit reviews.

DOM-04 REDUCE BASIC RESEARCH RELATED TO ENERGY AND MATERIALS SCIENCES BY THE DEPARTMENT OF ENERGY

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	621	621	621	621	621	621	3,726
Outlays	304	546	621	621	621	621	3,334
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	696	771	845	920	998	1,080	5,310
Outlays	341	648	798	873	949	1,029	4,638

For 1996, the Congress has provided the Department of Energy (DOE) with $2.5 billion for basic research in various fields. Four program areas account for the bulk of that funding: general science ($981 million), fusion ($244 million), basic energy science ($774 million), and biological and environmental research ($408 million). The studies that those programs fund are directed toward fundamental understanding of matter and energy and their use or, in the case of fusion, the development of an alternative source of energy. Spending in those areas supports the construction and operation of large, unique scientific instruments such as nuclear accelerators and research reactors, which are used by scientists in many different fields.

Reducing that research by 25 percent over the next three years would save $304 million in 1997 and $3.3 billion over the 1997-2002 period relative to the 1996 spending level. Relative to the 1996 level adjusted for inflation, the option would save $341 million in 1997 and $4.6 billion over the 1997-2002 period.

Throughout the postwar era, U.S. policymakers have agreed that supporting basic research is an important function of government in modern industrialized economies. No individual firm can capture all or even most of the benefits of basic research; consequently, the market, left to its own devices, would probably invest less in basic research than is best for society. Those premises have led to general agreement that the federal government should provide support for basic research. However, that principle does not tell policymakers how much support basic research should receive. Moreover, when budget reductions become necessary, even functions of government that are generally conceded to be worth supporting may have to be cut.

Proponents of cuts in DOE's programs of basic research argue that administrative efficiencies could be exploited to reduce costs without substantially lessening the amount of research being done. The final report in June 1995 of the Task Force on Strategic Energy Research and Development of the Secretary of Energy's Advisory Board found that "significant reductions in energy R&D costs can be achieved --without reducing the commitment to research-- through streamlining administration." On that basis alone, the task force recommended a 15 percent cut in energy R&D costs as an appropriate target.

Other proponents of cuts point to the findings of a 1995 National Academy of Sciences panel. The panel recommended cutting back research performed at DOE (and other national) laboratories, arguing that the mechanisms by which knowledge moves out of the labs and into the commercial world are less reliable than those in academia. Specifically, research at universities is embodied in its graduating students, many of whom find jobs in industry or other nonaca-

demic settings and thus disseminate knowledge rapidly through the economy. By contrast, the movement of personnel (and knowledge) out of DOE laboratories is much less predictable.

Defenders of DOE's basic science programs argue that, contrary to the assertions of critics, the scientific merit of the programs is great. Scientific peers apparently rate the quality of the programs' research as equivalent to that of the most research-intensive universities in the country. One recent survey of scientific citations of articles written by staff of DOE's multipurpose labs revealed that research scientists referred to the studies conducted there 20 percent more often than they referred to those coming out of research-intensive universities. The highest rates of citation were reserved for collaborations between university and DOE researchers. (Because new science is usually built on older findings, citation rates can measure the influence of particular findings and their usefulness to other scientists.)

Defenders also note that the scientific infrastructure that these programs provide has allowed scientists at universities and in industry to make advances in knowledge that have already proved useful. For example, much of the research into modern magnetic materials, which has enabled dramatic improvements in computer disks and other electronic devices, was conducted using DOE's neutron sources that are funded through these programs.

Fusion R&D differs from the rest of the programs in basic research, and as a result, both the criticisms and defense of it differ as well. Like the basic research programs, its results are decades away from commercial application, but unlike them, it is directed at a specific application: producing electrical energy through nuclear fusion. Critics argue that the funding level for this one research area is high considering that, even under the most optimistic scenarios, nuclear fusion will not be producing power for several decades. They also contend that the program has prematurely focused on one technology and ignored the broader field. In response to those criticisms and to recent funding cuts, DOE is redesigning the fusion program to emphasize basic understanding of the scientific phenomenon, but the bulk of its funding will still go to a limited range of alternatives. Defenders argue that the fusion program was cut back so severely last year that further cuts could jeopardize progress in that field.

DOM-05 ELIMINATE R&D PROGRAMS FOR NUCLEAR POWER AND FOSSIL FUELS

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	161	322	536	536	536	536	2,627
Outlays	66	195	377	494	536	536	2,204
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	178	354	586	603	619	637	2,977
Outlays	73	215	415	546	606	623	2,478

Among the principal categories of applied energy research that the Department of Energy (DOE) pursues are the development of nuclear power technology and more efficient and environmentally benign ways of using fossil fuels. In 1996, DOE expects to spend $569 million on research and development (R&D) in those two areas. Phasing out that R&D over the next three years would save $66 million in 1997 and $2.2 billion over the 1997-2002 period relative to the 1996 spending level. Relative to the 1996 level adjusted for inflation, this option would save $73 million in 1997 and $2.5 billion over the 1997-2002 period. (Those estimates exclude savings from the already scheduled closing of DOE research facilities and from the operations of the Isotope Production Fund, neither of which involves technology development.)

In the case of both fossil fuel and nuclear power R&D, critics of those programs maintain that development of applied energy technologies is better left to the private sector. They argue that companies in industries that are most likely to use the technology developed in such programs--often electrical utilities --and their equipment suppliers may be better able than DOE researchers to understand the commercial value of technology development. (Federal agencies typically lack market feedback for determining when a new technology is too expensive--or esoteric--for commercial purposes.)

Critics of the programs further argue that DOE should concentrate on basic energy research and reduce its involvement in applied technology development. They contend that the federal government has a comparative advantage in developing the basic science around a new energy source but is at a comparative disadvantage in the costly technology development and demonstration phases. The Congress, in general agreement over the benefits of basic energy research, appropriated $774 million for DOE's basic energy science program for 1996, up from $725 million in 1995. (See DOM-04 for budget reduction options in that program.)

The wisdom of pursuing new technologies in the field of nuclear energy R&D is questionable as long as electric utilities, the intended recipients, have no interest in building new nuclear power plants. (Part of the reason may be that national policy for addressing nuclear wastes remains undeveloped.) Since 1978, DOE has spent $9 billion on nuclear fission R&D, and during that period, not a single new nuclear plant was initiated.

Moreover, dramatic changes in the wholesale electricity market raise another concern. Policymakers recently began to open the electricity transmission market, enabling utilities to buy electricity from any group of suppliers rather than have to rely on captive sources. It may thus be time to let the newly opened market encourage the private sector to develop its own technology.

Defenders of DOE's programs argue that federally supported R&D in these areas helps offset several existing failures in the energy markets and consequently represents a sound investment for the nation. Current energy prices, they point out, do not reflect the environmental damage done by excess reliance on fossil fuels, including the potential for global warming. In addition, prices do not reflect the military and economic risks posed by reliance on Middle East oil. Although DOE's R&D programs cannot correct those market failures in the short run, they may moderate their consequences over the long term.

With regard to nuclear energy R&D, defenders of that program contend that its research will keep the nuclear option open for the nation in the years to come. The need for energy sources that do not emit greenhouse gases may intensify, as developing nations raise their level of energy consumption to match increases in industrialization. In addition, some of DOE's research may develop ways to consume nuclear wastes in the process of producing nuclear power. More generally, proponents argue that several technological advances have come from these efforts. For example, DOE claims that a partnership it established with industry developed a method of increasing the amount of energy extracted from each unit of nuclear fuel by 50 percent, thus reducing nuclear waste and lowering costs. Moreover, despite partial deregulation, proponents posit that electricity markets are still far from perfect and that consequently, federal intervention is justified.

Advocates also note that these programs have already experienced a steady reduction in size over the past decade and a half, especially in the technology demonstration area. Spending has fallen by well over 90 percent in inflation-adjusted terms since the late 1970s, when all parties agreed that DOE was generally too involved in expensive technology demonstration projects. In 1996, the Congress further reduced the appropriation by 11 percent, down from $639 million in 1995. (The major exception to the elimination of technology demonstration programs is the Clean Coal Program, which is discussed in DOM-07.)

DOE notes that energy R&D is below the national average for all industries and, more narrowly, private R&D in the energy area is stagnant or declining. Consequently, it avers, federal efforts are needed to compensate. All energy R&D, both federal and private, is equal to 1.1 percent of total spending on energy. By contrast, all R&D, again both federal and private, is equal to roughly 1.8 percent of the economy as a whole. Moreover, in the energy area, many of the largest corporate contributors to industrial R&D are reducing their spending because of corporate restructuring and the changing nature of competition in those markets.

DOM-06 ELIMINATE R&D FOR ENERGY CONSERVATION AND FOR SOLAR AND OTHER RENEWABLE ENERGY RESOURCES

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	200	400	667	667	667	667	3,268
Outlays	66	226	442	607	659	667	2,667
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	220	441	727	748	769	791	3,696
Outlays	73	249	484	670	742	771	2,989

In 1996, the Department of Energy (DOE) will spend $812 million for research and development (R&D) projects to develop new technologies for energy conservation and for solar and other renewable energy resources. Phasing out that R&D over the next three years would save $66 million in 1997 and $2.7 billion over the 1997-2002 period relative to the 1996 spending level. Relative to the 1996 level adjusted for inflation, the option would save $73 million in 1997 and $3.0 billion over the 1997-2002 period. (Funds for energy conservation R&D are distinct from technical and financial assistance programs, which would not be included in this option.)

Opponents of these programs make several arguments. Generally, they contend that the federal government should stop working to develop applied energy technologies and instead concentrate on basic research in the sciences that underlie them. Specifically, they note that many of the projects funded through these programs are small and discrete enough--and, in many cases, have a clear enough market--to warrant private investment. In such instances, DOE may be crowding out or preempting private-sector firms. In other instances, the programs conduct R&D that the intended recipients are likely to ignore--in many cases because it is too expensive or esoteric to implement.

Opponents of these programs also note that spending for energy conservation and solar and other renewable energy R&D has almost tripled since 1990, although funds for 1996 were cut by 28 percent relative to funding levels for 1995. Yet despite the reduction, spending for energy conservation R&D in inflation-adjusted terms is still at the levels of the late 1970s, when all parties agreed that DOE was overly committed to expensive technology demonstration projects. By contrast, DOE's solar and other renewable energy programs are roughly only one-third of their peak size in inflation-adjusted terms. (As a whole, applied energy R&D at DOE has fallen by roughly three-quarters since its peak.)

Critics of these programs also contend that the federal government supports the introduction of some of these technologies in other ways. Federal regulations require utilities to buy electricity produced by solar and alternative technologies, often at premium rates. Utilities are also encouraged to subsidize the purchase of conservation technologies by consumers. The tax code favors investments in conservation and solar energy technology and also provides incentives for the development of liquid fuels technologies derived from renewable resources (such as biomass). Ethanol fuels receive special treatment under the federal highway tax (see REV-36). In addition, federal regulations authorized by many different statutes favor alcohol fuels.

DOE's largest single solar energy program--photovoltaics--can claim to have achieved substantial

success, and opponents might argue that an orderly withdrawal of support by federal agencies is now appropriate. For one thing, several large factories for producing photovoltaic cells are either in operation or under construction, mainly for the export market. Moreover, critics point out that foreign firms are likely to dominate the photovoltaics market because of their higher domestic energy prices and hence their higher likely demand for alternative sources of energy. U.S. consumers can let those foreign companies and governments bear the costs of developing the energy sources and then buy the technologies later, when they are cheaper and have been perfected.

Defenders of these programs argue that major market failures continue to exist in energy markets, and thus federal R&D is needed to mitigate the long-term consequences of those failures. Energy consumers do not see the environmental damage done by excess reliance on fossil fuels, including the potential for global warming, in the energy prices they confront in the marketplace. Nor do those prices reflect the military and economic risks posed by reliance on Middle East oil. Advocates admit that these DOE R&D programs cannot correct those market failures in the short term but argue that over the long term, such programs can help.

Funding for energy R&D is below the national average for all industries; specifically, energy-related R&D funded by private parties is stagnant or declining, despite the risks posed by the market failures discussed above. Most notably, electric utilities and other large corporate performers of and investors in energy R&D are cutting down such investments. (The usual explanations for that decline are corporate restructuring and the changing nature of competition in those markets.) R&D spending, both federal and private, is equal to roughly 1.8 percent of the economy as a whole. By contrast, all spending on energy R&D, again both federal and private, is equal to 1.1 percent of total spending on energy.

Advocates of continued federal spending for this R&D note that energy conservation and solar and other renewable energy technologies developed at DOE laboratories have moved successfully into commercial markets. The solar and other renewable resources R&D programs have also had a history of requiring private financial participation in development projects to reduce the risk of sponsoring irrelevant research. Furthermore, advocates contend that even in instances in which the technologies have not yet been brought to market, applied federal research has brought down their costs substantially. That situation, they maintain, is different from R&D sponsored by DOE in the late 1970s, when the technology development that resulted would have been economic only if the price of oil was at a very high level.

One advantage these programs have over other R&D efforts in the energy technology area is that many of them are quite small. The small scale of the projects gives the Congress great flexibility in tailoring these programs to the size it wants without fear of losing all of their benefits, as is often the case with reductions in "big science" R&D programs. Over the years, many of the best outcomes of these research efforts have come from very small investments. Those successes include the development of films that make windows more energy efficient and are now found on roughly a third of new and replacement windows. More recently, R&D sponsored by DOE helped develop a sulfur lamp, which promises to provide an efficient alternative to the mercury vapor lamp.

DOM-07 ELIMINATE FURTHER FUNDING FOR THE CLEAN COAL TECHNOLOGY PROGRAM

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	0	138	138	138	138	138	690
Outlays	0	0	1	15	29	57	102
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	0	142	146	150	154	158	750
Outlays	0	0	1	15	31	60	107

The Clean Coal Technology Program (CCTP) was created in 1984 to assist private industry in developing commercial technologies that would use coal in environmentally sound ways. After five rounds of bid solicitations, the Department of Energy (DOE) will spend over $2.5 billion to fund and administer selected CCTP projects. The government's spending on those demonstration projects is limited to 50 percent of total costs. This option would complete projects already selected in rounds one through five of CCTP bid solicitations but eliminate any future funding for new projects. Savings would total about $100 million in projected outlays over the 1997-2002 period measured from both the 1996 funding level and the 1996 level adjusted for inflation.

An initial goal of the CCTP was to reduce acid rain by supporting technologies that could lower the emissions of sulfur dioxide (SO_2) and nitrogen oxides (NO_x) that result from coal combustion. President Reagan declared that his Administration would honor an agreement with Canada to spend $2.5 billion on clean coal technologies aimed at helping to curb acid rain in Canada. Other important goals of the program have been to promote the use of coal to replace imports of crude oil and to bolster the economies of coal-producing regions. Concerns about global warming and emissions of carbon dioxide have recently whetted policymakers' interest in increasing the efficiency of coal use.

Current practices that reduce SO_2 and NO_x emissions include cleaning the coal before burning it, scrubbing combustion gases to remove sulfur, switching to types of coal with a lower sulfur content, and switching to other fuels altogether. The new technologies that the CCTP supports fall into three general categories:

- Retrofit technologies that lower harmful emissions from existing coal-fired plants by cleaning the coal before combustion, reducing the level of gases emitted during combustion, or scrubbing the gases emitted during combustion;

- Repowering technologies that replace all or part of existing boilers with advanced combustion systems that both reduce emissions and increase power output; and

- Conversion technologies that change coal into a liquid or gas.

Most of the projects funded by the CCTP will demonstrate technologies to retrofit or repower electricity-generating plants that burn coal.

Federal support for new clean coal technologies may no longer be necessary. In the past, supporters of the CCTP viewed it as an alternative to legislation for controlling acid rain: the enactment of ill-timed

controls could force industry to invest in current, high-cost abatement technologies when new, low-cost ones might be just around the corner. Since the passage of the Clean Air Act Amendments of 1990, however, the private sector has faced a clear legislative mandate for lowering coal emissions. Electric utilities and large industrial users of coal now have a clear economic motive for selecting from among current practices and new technologies the lowest-cost options for reducing emissions. DOE efforts may also be redundant in the light of independent research efforts by utilities themselves and by states that produce high-sulfur coal and want to maintain the product's sales. Moreover, the energy security benefit of increased coal use would be negligible, because coal today substitutes for oil in very few applications.

Alternatively, continued CCTP funding could hasten deployment of control and abatement technologies that would provide social benefits beyond what electric utilities would be willing to pay for under the Clean Air Act Amendments. Those benefits could come in the form of cleaner air and economic support for electricity consumers in general and for coal-producing regions in particular.

DOM-08 ELIMINATE ENERGY CONSERVATION GRANT PROGRAMS

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			From the 1996 Funding Level				
Budget Authority	138	138	138	138	138	138	828
Outlays	34	110	131	138	138	138	689
			From the 1996 Funding Level Adjusted for Inflation				
Budget Authority	142	146	150	155	159	164	916
Outlays	35	115	139	150	155	159	753

This proposal would halt new appropriations for three block grant programs that support energy conservation activities by the states. In 1996, the biggest of those appropriations is for weatherization assistance ($112 million), followed by institutional conservation and state energy conservation ($26 million). This option would halt new appropriations for those grant programs, saving $34 million in 1997 outlays and $689 million in outlays from 1997 through 2002 measured against the 1996 funding level. The option would save $35 million in 1997 outlays and $753 million in outlays from 1997 through 2002 measured against the 1996 level adjusted for inflation.

The Weatherization Assistance Program helps low-income households reduce their energy bills by funding such activities as installing weather stripping, storm windows, and insulation. The states have reported to the Department of Energy (DOE) that about 4 million homes have been weatherized since 1977, when the program began. The Institutional Grant Program helps reduce the use of energy in educational and health care facilities by adding federal funds to private and local public spending to encourage local investment in building improvements. And the State Energy Conservation Program funds projects that, for example, establish energy-efficiency standards for buildings and promote public transportation and carpooling. Those three DOE programs are independent of a similar block grant activity, the Low Income Home Energy Assistance Program, administered by the Department of Housing and Urban Development.

Federal grants to promote less consumption of energy are in many respects an artifact of the mid-1970s and the widespread concerns about energy security--for all sources, including oil, natural gas, and coal--prevalent at that time. Today, those concerns are more correctly focused on imported oil supplies. Little benefit to the cause of oil-supply security can come from state grant programs that help reduce residential and institutional demand for natural gas and coal-generated electricity. And although the government has attached some urgency to the need to reduce energy use for environmental reasons, federal support for reducing the use of gas and coal through conservation grants for security or environmental needs is clearly at odds with other federal policies that simultaneously promote the production and use of those fuels.

In any case, the large savings of energy that states claim for these conservation programs may be overstated. Those claims have never been subjected to critical analysis by DOE or by any of the Congressional support agencies. According to DOE, total annual savings are on the order of 4.7 quadrillion Btus (British thermal units), a questionable result given that the figure represents over 15 percent of current energy use in the residential and commercial sectors. In contrast, the 4 million homes that DOE reports have benefited from energy conservation

grants constitute less than 5 percent of the total households in the United States.

Discontinuing the grant programs could impose hardships on states that wish to continue their energy conservation efforts but are experiencing financial distress. Many states still rely heavily on such grants to assist low-income households and public institutions. According to DOE, over 20 percent of all eligible buildings have had some energy improvements as a result of the Institutional Grant Program. The Weatherization Assistance Program currently helps weatherize about 100,000 homes per year, and more than 27 million homes remain eligible for assistance. Such figures may compel continued federal support in the energy conservation area.

This proposal would not affect spending for the three DOE grant programs that are funded by offsetting collections (money that the Department of Energy receives in court settlements resulting from current prosecutions of violations of federal laws regulating petroleum prices in the 1970s). Those collections total $17 million in 1996, with additional amounts estimated to total about $40 million over the 1997-2002 period.

DOM-09 SELL THE STRATEGIC PETROLEUM RESERVE

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	28	28	45	81	81	81	344
Outlays	15	24	37	62	76	81	295
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	37	45	71	116	125	135	529
Outlays	20	36	58	92	114	129	449

The Strategic Petroleum Reserve (SPR) was first authorized by the Energy Policy and Conservation Act of 1975 (EPCA) to help safeguard the nation against the threat of oil supply disruptions. The SPR is a government-owned stock of crude oil, available for release at the discretion of the President in the event of a severe disruption of supplies or under the obligations of international agreements. The Department of Energy (DOE) has released oil from the SPR in emergency circumstances only once, during the Persian Gulf crisis. It has, in addition, released oil in test sales on two occasions. Early in 1996, DOE initiated a sale of 7 million barrels of SPR oil to help pay for the transfer of over 70 million barrels from the Weeks Island storage site, which is being shut down. The Omnibus Appropriations Act of 1996 has directed DOE to sell another $227 million in oil by the end of 1996.

Once that sale is completed, the reserve will hold about 570 million barrels of crude oil stored in four underground sites. As amended in 1990, EPCA authorizes DOE to store up to 1 billion barrels of oil for emergency use. Without Weeks Island, DOE has storage capacity for up to 680 million barrels and a maximum capability for releasing, or "drawing down," oil from the reserve at a rate of 3.9 million barrels per day (bbl/day). Problems at several of the storage sites have brought the current drawdown capability to about 3 million bbl/day--just over 40 percent of the nation's daily level of crude oil imports in 1995.

This option would scale down the SPR program and sell off enough crude oil to close two of the remaining four storage sites, leaving about 420 million barrels in the reserve. That amount, in combination with the private stocks that would be available for drawdown (that is, stocks in excess of minimum operating inventories) and the capability of oil consumers to reduce purchases and of domestic oil producers to increase output, would enable the United States to replace its net oil imports in 2002 for 60 days. That assessment is consistent with the way private stocks, oil use, and domestic oil production responded to the disruption of world oil supplies in the Persian Gulf War.

Closing down the two sites could generate budgetary savings by avoiding appropriations for their operation and maintenance. Outlay savings from that avoided spending would total $295 million over the 1997-2002 period measured against the 1996 funding level and $449 million over that period measured against the 1996 level adjusted for inflation. Additional proceeds from the sales of crude oil and of storage and transportation facilities at the two sites could bring the total savings to more than $3 billion over the period. Under current law, however, the proceeds from those sales would not count as budgetary savings.

The fundamental rationale for developing the Strategic Petroleum Reserve was an economic one. Specifically, policymakers believed that an emer-

gency release of strategic stocks of oil could help the nation sustain its economic output and consumption by lowering oil prices and enabling the economy to reduce its total level of oil imports. Depending on the circumstances of the crisis, a release might also help the economy avoid the costs of adjusting to temporarily higher prices for oil.

Two general areas of concern underlie a proposal to scale back the SPR program. First, institutional changes in the oil market and the economy have reduced the threat and potential costs of disruptions of oil supplies in ways that have lessened the potential benefits of releasing SPR oil in a crisis. Second, recent problems affecting the readiness of the SPR indicate that the future costs of maintaining the reserve will be greater than previously assumed.

The potential benefits from releasing SPR oil are fewer today than they were in the past because the economy is better able to accommodate a disruption of oil supplies without major adverse effects. In particular, a number of institutional changes in the oil market and the economy now allow the United States to significantly lower its requirements for imported oil on short notice. As a result, the nation's payments for imports do not rise commensurately with oil prices. For example, because petroleum prices today are not regulated, the domestic oil market receives the proper price signals to reduce the use of oil and increase domestic production in response to an oil price shock. And institutions such as futures markets have reduced the pressure on businesses to accumulate private stocks of oil during a crisis, which further curtails oil imports. Moreover, the role of oil in the nation's economic activities is smaller today than it was in the past: businesses and individuals make greater use of other fuels and use all fuels more efficiently than in the 1970s, when the SPR was conceived. Thus, any rise in oil prices today has a smaller effect on inflation and, in turn, less impact on real income and consumer expenditures.

Aside from declining benefits, the growing costs of maintaining the SPR also strengthen the case for eliminating it. After nearly 20 years, many of the SPR's facilities are showing signs of age in ways that both reduce the SPR's drawdown capability and point to mounting expenditures in the future for maintenance. Today, the SPR can effectively distribute about 3 million bbl/day for 100 days--far below the design capacity of the reserve. The smaller drawdown capability stems from problems of natural gas seepage into some of the storage caverns and excessive heat, which DOE is currently working to address. The seepage increases the gas content of the oil and makes it too volatile for transportation. Excessive heat in the storage caverns creates higher vapor pressure for the crude oil and increased air emissions during drawdown. Those problems mean that about 200 million barrels of SPR oil cannot be removed safely at this time. A third problem has been water leakage in the Weeks Island caverns, which once held a total of 73 million barrels of oil.

Arguments against eliminating the reserve are rooted in an alternative view of its benefits and costs. Proponents of keeping the SPR contend that the economic costs of maintaining the reserve may still be significantly less than the potential benefits to be gained from releasing its oil during a future disruption of oil supplies. A further argument calls for retaining the SPR as a national security asset. For example, the federal government is a major consumer of oil, and the SPR could be a supply for its use. Moreover, to the extent that the United States is in a position to affect the world supply of and demand for oil through its military and geopolitical activities, it will have greater freedom to pursue those activities if it can use the SPR to mitigate their effects on world oil prices.

DOM-10 ELIMINATE ELECTRIFICATION AND TELEPHONE CREDIT SUBSIDIES PROVIDED BY THE RURAL UTILITIES SERVICE

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	100	100	100	100	100	100	600
Outlays	10	30	55	80	95	98	368
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	103	106	109	112	115	118	663
Outlays	10	31	58	85	103	109	396

The Rural Utilities Service (RUS) is an agency within the Department of Agriculture that, among other activities, offers financial assistance in the form of subsidized loans and grants to electric and telephone companies serving primarily rural areas. This option addresses only the credit subsidies provided through loans for electrification and telephone service that were previously administered by the Rural Electrification Administration (REA). The former REA programs were combined with other loan and grant programs in 1994 to form the RUS. (Additional potential savings from cutting other RUS programs are described in DOM-33.)

For 1996, RUS subsidies to electric and telephone companies total about $100 million. In addition, the agency spends nearly $35 million per year administering those programs. Eliminating the credit subsidies for loans made or guaranteed by the RUS would reduce outlays by an estimated $10 million in 1997 and $368 million between 1997 and 2002 measured from the 1996 funding level. Total savings over that period from the 1996 funding level adjusted for inflation would be $396 million.

Most of the borrowing that the REA subsidized was established in the 1930s, 1940s, or 1950s. Many communities served by those borrowers are now much larger than the original service-area requirement of no more than 1,500 inhabitants. In total, the agency's borrowers serve about 10 percent of the nation's electricity consumers and about 4 percent of its telephone customers.

Credit subsidies for loans to rural electric and telephone companies were reduced by more than one-half from 1993 to 1994, reflecting the significant changes in the program enacted in the Rural Electrification Loan Restructuring Act of 1993. Moreover, because the cost of federal borrowing declined significantly in 1992 and 1993, the average subsidy provided for the RUS's low-interest (5 percent) loans also decreased. Before passage of the 1993 act, most RUS borrowers were eligible for 5 percent loans. Under the restructured program, some borrowers are still eligible for the 5 percent loans; others may borrow from the agency at slightly higher (although still subsidized) rates; and still others may borrow either at the rate that the Treasury pays to borrow or 7 percent, whichever is less. Although the appropriation for the cost of subsidies for all lending related to rural electrification and telephone service declined from about $200 million in 1993 to about $100 million in 1996, the agency may still make new loans totaling over $1 billion this year.

The savings shown in the table could result from either of two scenarios: discontinue lending and require RUS borrowers to use private sources of capital for all of their loan needs, or continue a federal loan program but eliminate subsidies. A loan program with no subsidy costs would require raising the inter-

est rates on loans to rural electric and telephone companies to the level of the Treasury's cost of borrowing; it would also mean charging small loan origination fees to cover the cost of defaults for certain classes of loans. In addition to savings in subsidy costs, some savings in administrative costs could result if all such lending was discontinued. Some of the nearly $35 million per year in current salaries and expenses would be required to administer existing loans, but those costs could be gradually reduced under a no-new-lending option. Potential administrative savings of more than $25 million over the 1997-2002 period could be achieved by eliminating the program, but those additional savings are not counted in this option.

The loan program for rural electrification and telephone service has largely fulfilled its original goal of making those services available in rural communities. Yet many borrowers still depend on federal loans to maintain and expand those utilities. Increasing the interest rates or charging origination fees on some loans would raise the rates such borrowers charged their customers, especially in the rural regions that are most affected. Borrowers argue that they need some level of subsidization to keep their service and utility rates comparable with those in urban areas. Most RUS borrowers already use some private financing, however. Because the cost of interest accounts for only a small percentage of the typical customer's bill, eliminating the remaining federal subsidy would have little effect on the utility rates that most borrowers charge their customers.

DOM-11 INCREASE NET RECEIPTS FROM NATIONAL FOREST TIMBER SALES

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			From the 1996 Funding Level				
Budget Authority	20	35	50	65	75	95	340
Outlays	15	30	45	60	70	90	310
			From the 1996 Funding Level Adjusted for Inflation				
Budget Authority	20	35	50	65	75	95	340
Outlays	15	30	45	60	70	90	310

The Forest Service (FS) manages federal timber sales from 119 national forests in the national system. In 1995, the FS sold roughly 2.9 billion board feet of public timber under contract to private lumber companies. Those companies may harvest the timber over several years; they make payments to the FS only upon harvest. The total 1995 harvest, approximately 3.9 billion board feet, represented a continuing decline in volume from previous years. It brought in about $616 million in federal timber receipts, but during 1995, the FS spent over $850 million on timber management, reforestation, construction of logging roads, payments to states, and other timber program costs. Thus, in 1995, the FS spent more on the timber program than it collected in receipts for timber harvesting.

The FS does not maintain the data needed to estimate annual timber receipts and the expenditures associated with each individual timber sale. Therefore, it is hard to determine precisely the budgetary savings that could be achieved by phasing out all timber sales in the National Forest System for which expenditures were likely to exceed receipts. As an illustration of the potential savings, however, eliminating all future timber sales from the three National Forest System regions in which past imbalances between cash receipts and expenditures have been most prominent would reduce net outlays in the federal budget by about $310 million through 2002.

In seven of the nine National Forest System regions, annual cash receipts from federal timber harvests have consistently failed to cover the FS's annual cash expenditures. In the Rocky Mountain, Northern, and Intermountain regions, for example, cash expenditures have exceeded cash receipts by a ratio of about 3 to 1, on average, over the past decade. Annual costs of the timber program in the three regions still exceed annual timber receipts if FS expenditures for road construction are excluded. Eliminating all future timber sales from those regions would reduce FS outlays over the 1997-2002 period by about $370 million, which includes savings in the timber road budget. Timber receipts would be reduced by about $60 million after subtracting payments to states. (Because the estimated savings are based on an actual program estimate of the agency's cost of preparing the timber for sale and harvest, the savings would be the same whether measured against the 1996 funding level or that level adjusted for inflation.)

Timber sales for which expenditures exceed receipts have several potential disadvantages. They may lead to increases in the federal deficit, excessive depletion of federal timber resources, and destruction of roadless forests that are valued by many recreational visitors.

Potential advantages of the sales include community stability in areas dependent on federal timber for logging and other related jobs. Timber sales also improve access to the land--as a result of road construction--for fire protection and recreation.

DOM-12 ELIMINATE FEDERAL GRANTS FOR WATER INFRASTRUCTURE PROGRAMS

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	2,155	2,155	2,155	2,155	2,155	2,155	12,930
Outlays	97	675	1,422	1,881	2,088	2,155	8,318
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	2,219	2,284	2,350	2,416	2,483	2,554	14,306
Outlays	100	697	1,488	2,004	2,274	2,407	8,970

The Clean Water Act (CWA) and the Safe Drinking Water Act prescribe performance requirements for municipal wastewater and drinking water systems to protect the quality of the nation's water and the safety of its supplies of drinking water. The Clean Water Act also provides financial assistance so that communities can construct wastewater treatment plants that comply with the provisions in the act. (The CWA requires secondary treatment of wastewater to remove at least 85 percent of raw pollutants.) In 1996, the Congress appropriated about $2.2 billion for water infrastructure programs including funds for wastewater programs and a new program for drinking water facilities. However, funds for the drinking water facilities program cannot be used until the program is authorized.

Construction grants for wastewater treatment plants were first authorized in 1972 under the Title II categorical grant program of the CWA. The Environmental Protection Agency (EPA) administered the construction grant program by providing assistance directly to municipalities for wastewater treatment projects. (Federal funds for the program were and still are channeled through EPA's annual appropriations.) Since 1972, the Congress has appropriated over $65 billion to assist localities in complying with the CWA.

The Clean Water Act, as amended in 1987, phased out Title II grants and authorized a new grant program under Title VI to support state revolving funds (SRFs) for water pollution control. In the new regime, states continue to receive federal grants but are now responsible for developing and operating their own programs. For each dollar of Title VI grant money that a state receives, it must contribute 20 cents to its SRF. States then use the combined funds to make low-interest loans to communities to construct or upgrade municipal wastewater treatment facilities. Local agencies that borrow funds from the state revolving fund for construction must repay them, thus creating a revolving source of capital for other local communities.

The Congressional Budget Office projects that support for federal grants for water infrastructure will continue at the 1996 level of $2.2 billion, adjusted for inflation. Ending all funding of new water infrastructure projects after 1996 would save $97 million in 1997 and $8.3 billion through 2002 measured from the 1996 funding level. Measured from the 1996 level adjusted for inflation, savings would be $100 million in 1997; they would total $9 billion over the six-year period.

Federal contributions to the SRFs were intended to help in the transition to full state and local financing of the funds by 1995. Proponents of eliminating federal grants to SRFs argue that the program was meant to be temporary and may have replaced, rather than supplemented, state and local spending. They also point out that in some cases, the grants may have encouraged inefficient treatment decisions by making

it possible for SRFs to loan money at below-market rates of interest. Below-market rates could reduce the incentives for local governments to find less capital-intensive and less costly alternatives for controlling water pollution.

Opponents of such cuts argue that states and localities would find it more difficult to meet the federal treatment deadlines without continued federal contributions because repayments to the SRFs would be insufficient to fund new projects. States would also be unable to shoulder the additional cost of decreased contributions to the SRFs. For example, EPA estimates that additional treatment facilities and upgrades--at a cost of $127 billion--would have to be built over the next two decades for states to meet the current goals set by the CWA. Some people who oppose eliminating federal grants maintain that cutting federal funds would increase the burden of unfunded mandates on state and local governments.

DOM-13 IMPOSE A FIVE-YEAR MORATORIUM ON LAND PURCHASES BY THE DEPARTMENTS OF AGRICULTURE AND THE INTERIOR

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	128	128	128	128	128	128	768
Outlays	40	88	119	128	128	128	631
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	132	136	141	145	151	155	860
Outlays	41	92	127	140	145	150	695

The Departments of Agriculture and the Interior currently receive appropriations of about $110 million per year to buy land that is generally used to create or expand designated recreation and conservation areas including national parks, national forests, wilderness areas, and national wildlife refuges. Purchases are made directly by the federal government or through grants to states and localities, which match the grants dollar for dollar. Placing a five-year moratorium on future appropriations for land purchases and state grants by these departments would save $40 million in 1997 and $631 million between 1997 and 2002 measured against the 1996 funding level, and $41 million in 1997 and $695 million between 1997 and 2002 measured against the 1996 level adjusted for inflation. The option would provide for a small annual appropriation ($10 million) to cover emergency acquisition of important tracts that became available on short notice, compensation to "inholders"--landholders whose property lies wholly within the boundaries of an area set aside for public purposes (for example, a national park)--and ongoing administrative expenses.

Proponents of this option argue that land management agencies should improve their stewardship of the lands they already own before taking on additional management responsibilities. In many instances, the National Park Service, the Forest Service, and the Bureau of Land Management find it difficult to maintain and finance operations on their existing landholdings. Further, given the limited operating funds of those agencies, environmental objectives such as habitat protection and access to recreation might be best met by improving management in currently held areas rather than providing minimal management over a larger domain. Another argument made in favor of this option is that the federal government already owns enough land. Currently, more than 650 million acres--approximately 30 percent of the United States' land mass--belong to the government. The sentiment that this amount is sufficient is particularly strong in the western United States, where nearly half of the land area of 11 states is under federal ownership.

Opponents argue that future land purchases are necessary to achieve ecosystem management objectives and fulfill existing obligations for national parks. Much of the land targeted by the Congress for new and expanded federal reserves is privately held, and acquiring it will require purchases. Furthermore, encroaching urban development and related activities outside the boundaries of national parks and other federal landholdings may be damaging resources inside the parks. Land acquisition is an important tool for mitigating that problem. Acquisitions that consolidate landholdings may also help to improve the efficiency of public land management.

DOM-14 ELIMINATE THE SUPERFUND PROGRAM OR REVISE ITS CLEANUP CRITERIA

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Eliminate the Program							
From the 1996 Funding Level							
Budget authority	781	1,302	1,302	1,302	1,302	1,302	7,291
Outlays	195	599	937	1,120	1,211	1,237	5,299
From the 1996 Funding Level Adjusted for Inflation							
Budget authority	806	1,385	1,426	1,468	1,511	1,557	8,153
Outlays	202	628	1,003	1,226	1,356	1,424	5,839
Revise the Cleanup Criteria							
From the 1996 Funding Level							
Budget authority	150	150	150	150	150	150	900
Outlays	38	90	120	135	143	143	669
From the 1996 Funding Level Adjusted for Inflation							
Budget authority	155	165	170	175	180	185	1,030
Outlays	39	95	131	151	164	171	751

The Superfund program has been in existence since 1981 but is far from completing its mission of cleaning up the nation's worst hazardous waste sites. The Environmental Protection Agency (EPA), which administers the program, expects to spend a total of $31 billion cleaning up the first 1,354 sites on the National Priorities List (NPL), including $17 billion in 1995 and beyond. Those costs will probably rise as additional sites are added to the NPL. In 1994, the Congressional Budget Office estimated that EPA's future Superfund costs may be between $35 billion and $130 billion, depending on the ultimate number of sites addressed by the program, and that spending by the parties legally responsible for cleaning up specific sites will be roughly twice the EPA level. CBO's estimates focused on sites not owned by the federal government; substantial related expenditures will be required by the Energy and Defense Departments and by other agencies responsible for federally owned NPL and non-NPL sites.

Superfund's critics argue that the program takes too long to clean up sites, creates excessive litigation in the private sector, and addresses a problem that poses too little risk to health and the environment to justify its costs. The program's supporters argue that the pace of Superfund cleanups has increased in recent years: at the end of 1995, 346 NPL sites were either cleaned up or in the final phase (operations and maintenance), compared with 61 sites in that condition at the end of 1991. Supporters also contend that litigation costs can be reduced through reforms that do not abandon the basic nature of the program and that cleaning up contaminated sites significantly reduces health risks and is a high priority with the American public.

Eliminate the Program. One approach the Congress could take to reduce federal spending for Superfund would be to terminate the program. That approach would retain regulations regarding cleanup

at federally owned sites and "treatment, storage, and disposal" facilities covered by the Resource Conservation and Recovery Act, but it would eliminate Superfund's cleanup requirements and liability system for abandoned, nonfederal waste sites. After taking into account various shutdown costs, that option would save $195 million in 1997 and $5.3 billion over the 1997-2002 period measured from the 1996 funding level. It would save $202 million in 1997 and $5.8 billion over six years measured from the 1996 level adjusted for inflation.

The two main arguments for eliminating the Superfund program are that hazardous waste sites pose relatively low risks to the public and that such sites are local concerns that should be handled, to the extent that they are handled at all, at the state or local level. In a 1987 report, EPA experts ranked the cancer risks of inactive hazardous waste sites as the eighth highest of 29 environmental problems studied (below worker and consumer exposure to chemicals, radon and other indoor air pollutants, pesticide residues on food, outdoor air pollution, and ozone depletion) and judged the noncancer health risks to be in the lowest of three risk groups.[1] Moreover, unlike problems of air and water pollution, problems associated with hazardous wastes generally do not extend beyond the vicinity of the waste sites themselves. (Sites that contaminate large rivers or underground aquifers are the main exception to the general rule, but even those sites typically affect areas within only one or two states.) Indeed, the large majority of states have already established their own cleanup programs for sites not addressed under the federal law.

The case for continuing the federal Superfund program begins with the argument that cleaning up hazardous waste sites is worthwhile. EPA cites what it calls a growing body of evidence that people living near Superfund sites have more health problems than the general public, including birth defects, leukemia, cardiovascular abnormalities, respiratory illness, and immune disorders. Many sites have exposed people to such hazards as lead, trichloroethylene, chromium, benzene, and arsenic.

One argument for continuing to run the cleanup program at the federal level is that doing so yields economies of scale: dealing with a large number of sites allows EPA to learn from experience, and centralization facilitates coordination and dissemination of research on improved cleanup technologies. A second argument is that some states that wished to continue cleanups at Superfund sites within their borders would have difficulty replacing the federal dollars. Superfund's excise taxes on petroleum and chemicals would yield little or no revenue in some states and might be unworkable (because of business mobility) in others, so many states would have to use more broadly based taxes on personal or business income or property, or cut other forms of spending. Although current Superfund spending is on the order of 0.1 percent of the budgets of state and local governments nationwide, states with small tax bases and large cleanup problems could face difficult tradeoffs.

The savings estimated for this option are based on the reductions in federal spending and do not reflect any offsetting changes in tax revenues. Prior to their expiration on January 1, 1996, Superfund's excise taxes and corporate environmental income tax were the program's dominant source of funding, supplemented by appropriations from the general fund, recoveries of past expenditures from parties liable for site cleanups, and other sources. In fact, because the dedicated tax receipts exceeded Superfund's appropriation in 1994 and 1995, the program as a whole actually reduced the deficit in those years rather than enlarged it. Now that the Superfund taxes have expired, however, eliminating the program would reduce the deficit as estimated above.

Revise the Cleanup Criteria. Another option would be to change the standards and methods used to protect health and the environment at Superfund sites. Less stringent cleanup standards could be chosen when they were consistent with the expected use of the land in the future, and the statutory preference for permanent treatment technologies could be relaxed to allow more use of containment methods, such as caps, slurry walls, and surface water diversion. An unpublished EPA analysis estimated that a set of such changes proposed by the Administration in 1994 would reduce annual cleanup costs in the Superfund budget by $156 million, or 19 percent. That figure is

1. Environmental Protection Agency, Office of Policy, Planning, and Evaluation, *Unfinished Business: A Comparative Assessment of Environmental Problems* (February 1987).

consistent with a range of savings of $101 million to $162 million calculated independently by the Office of Management and Budget. In 1995, studies by researchers at Brattle/IRI and the University of Tennessee estimated that average cleanup costs could be reduced by 35 percent to 38 percent and by 21 percent, respectively, by eliminating the statutory criteria of permanence, treatment, and "applicable or relevant and appropriate requirements," and by focusing instead on protecting health and the environment at the lowest cost. The Brattle/IRI study analyzed 50 EPA cleanup decisions, and the Tennessee researchers examined 514 decisions. The Tennessee study also estimated that cleanup costs could be cut by 34 percent through a 50 percent reduction in the use of treatment technologies.

The potential savings from this option would depend on the specific legislative language used to change the program. As an illustration, CBO has estimated the effects of a 30 percent reduction in cleanup costs. Such a change would reduce outlays for Superfund cleanups by $669 million over the 1997-2002 period measured from the 1996 funding level, or $751 million measured from the 1996 level adjusted for inflation. To realize those savings, budget authority for the Superfund program would have to be cut in the annual appropriation process. (Total savings could be somewhat greater if the Congress also cut budget authority for Superfund's enforcement activities, on the grounds that the private parties legally responsible for cleanup would have less incentive to contest their liabilities. Potentially large additional savings could result from cutting appropriations for related cleanup programs of the Departments of Energy and Defense.) Alternatively, the Congress could choose to maintain appropriations at the 1996 or 1996-plus-inflation level to increase the number of sites undergoing cleanup at one time (which would push the deficit savings off into the future).

Proponents of this option argue that it is wasteful to spend more on Superfund cleanups than is necessary to protect health and the environment and that the use of more permanent remedies (such as incineration, bioremediation, and vitrification) can be deferred until land-use needs are clearer and treatment technologies are better developed. Opponents argue that the option may not provide as much protection as supporters claim and that invoking it would be unfair to local communities (which would bear the disruptive effects of the land-use restrictions) and to future generations (which would bear any costs of replacing interim cleanups with more permanent measures). Some opponents also assert that the lion's share of cost savings from any significant reduction in remediation requirements should take the form of cuts in the Superfund taxes. Modifying the proposal in that way would substantially reduce the net benefit to the federal budget.

DOM-15 REDIRECT THE NUCLEAR WASTE DISPOSAL PROGRAM TOWARD AN INTERIM STORAGE POLICY

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			From the 1996 Funding Level				
Budget Authority	138	136	34	-68	-70	-122	48
Outlays	133	136	44	-58	-70	-117	68
			From the 1996 Funding Level Adjusted for Inflation				
Budget Authority	151	160	71	-19	-9	-48	306
Outlays	143	160	79	-9	-10	-44	319

The Nuclear Waste Policy Act of 1982 directed the Department of Energy (DOE) to develop permanent disposal facilities for spent nuclear fuel and high-level radioactive waste. To fund that development, the act authorized a fee to be paid by electric utilities that operate nuclear power plants. By 1987, DOE was studying three sites as possible locations for the first repository, but amendments to the act in that year instructed DOE to limit its investigation to the Yucca Mountain site in Nevada. The act originally set 1998 as the target for opening the first repository, but that date has long since slipped. DOE now officially estimates that it will determine the suitability of the Yucca Mountain site in 1998; should the site prove suitable, DOE will start receiving wastes there in 2015. However, even those revised dates remain subject to change.

In the meantime, many utilities will exhaust the capacity of their current facilities for on-site interim storage of spent fuel. The dominant method now in use submerges the fuel rods in pools of water; the water acts as both coolant and radiation shield. According to DOE data, 25 of 118 operating and closed reactors will run out of pool storage space by 1998, and 87 will run out of space by 2010. The original 1982 Nuclear Waste Policy Act directed DOE to provide a limited amount of interim storage--up to 1,900 metric tons of capacity--but the volume of spent fuel ready for storage by 2010 would greatly exceed that amount.

Under this option, DOE would build an interim storage facility in the vicinity of the Yucca Mountain site and also cut back its efforts to develop a permanent repository. Specifically, it would establish 2000 as the target date for opening an interim facility with an initial capacity of 10,000 metric tons and an ultimate capacity of 40,000 tons, and reduce funding for the permanent repository by 75 percent. CBO estimates that the cost of opening and operating the interim facility would rise to a peak in 2002 before declining, yielding negative net savings for the option in the early part of the next decade. Over the 1997-2002 period, however, the option would reduce spending by $68 million measured from the 1996 funding level or $319 million measured from the 1996 level adjusted for inflation. The option could be modified by changing the target date for opening the interim facility or the percentage reduction in funding for the permanent repository. Later target years and steeper funding cuts would yield greater savings; earlier target years and smaller cuts would produce less.

The main argument for this option is that it would simultaneously address two goals: fulfilling the government's commitment to take custody of nuclear wastes from electric power plants and reducing the deficit. The opportunity to advance both goals, rather than either one alone, is the rationale for coupling the development of an interim facility with lower spending for a permanent repository.

An important argument against the option is that it would cut total spending for a program whose current expenditures already fall below the funds collected for them. Each kilowatt-hour of electricity sold from a nuclear power plant is assessed a fee of one mill (one-tenth of a cent), which goes to the Nuclear Waste Fund (NWF). By the end of 1995, the fund had accumulated a balance of $4.7 billion. Ultimately, each dollar in the NWF balance must either be spent in accordance with the fund's intended purpose or be diverted to other purposes--for example, transferred to the general fund. This option would cut spending and thereby further increase the NWF balance; to the extent that the increase was eventually absorbed by spending for nuclear waste disposal, the reduction in the federal deficit would be temporary and would be offset by larger deficits in later years. To the extent that the option led to, or increased the amount of, a future diversion of NWF balances to other purposes, it arguably would break faith with nuclear utilities and their customers by retroactively converting part of the dedicated fee to a general-purpose tax.

Other factors to be considered in evaluating the option are its effects on the total costs of nuclear waste disposal and the implications of delaying development of a permanent repository. Centralizing interim storage instead of adding capacity at individual reactor sites might reduce total costs. In contrast, the slower rate of spending for development and construction of a permanent repository might raise total costs by inefficiently stretching them out.

The opening of a permanent repository might be delayed not only by slower spending but also by a loss of attention on the part of decisionmakers after an interim facility opened. On the one hand, such delays would postpone the anticipated safety benefits of a permanent solution to the nuclear waste problem. On the other hand, they might allow for more careful analysis and decisionmaking and for development of improved storage technologies or alternative uses for the spent fuel and other waste products.

DOM-16 REDUCE NATIONAL WEATHER SERVICE COSTS

	Annual Added Receipts or Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			Price NWS Information at Market Value				
Addition to Current-Law Receipts	2	2	2	2	2	2	12
			Eliminate the NOAA Weather Radio Network				
Savings from the 1996 Funding Level							
Budget authority	17	7	7	7	7	7	52
Outlays	6	8	10	9	7	7	47
Savings from the 1996 Funding Level Adjusted for Inflation							
Budget authority	17	7	7	7	8	8	54
Outlays	6	8	10	9	8	8	49

The National Weather Service (NWS) provides weather and flood warnings, public forecasts, and severe-weather advisories to protect lives and reduce property damage resulting from those hazards. The annual budget for such services, including operating weather satellites, is about $1 billion. The NWS is in the midst of a multiyear $4.5 billion modernization and restructuring program to upgrade technology and replace obsolete equipment. That ambitious effort, which was expected to yield significant benefits, has been hampered by large cost overruns, delays, and operational problems.

A range of privatization options for the NWS offers potential opportunities for budgetary savings and better customer service. Private firms already play a significant role in the weather service industry. Estimates of the gross annual revenues of the more than 100 firms in the private weather sector range from $200 million to $250 million; however, the scope of the private market is constrained by the operations of the NWS. Official government policy states that the NWS "will not compete with the private sector when a service is currently provided or can be provided by commercial enterprises, unless otherwise directed by applicable law." This year the NWS is privatizing most of its specialized weather services, which provide targeted benefits to the aviation, marine, and agricultural communities. Annual savings will be about $3 million. To yield the most in budgetary savings, the government's role could be limited to supporting services that are essential to ensure public safety and the international exchange of information, and possibly to underwriting basic research.

Price NWS Information at Market Value. Currently, the NWS allows open access to all of its weather data and information services. Access to that information has contributed substantially to the growth of the weather service information industry, which transforms NWS data and general forecasts for large areas into marketable specific forecasts. Commercial users--for example, the Weather Channel and Accu-Weather--are charged fees to cover the costs of computer hookups and transmission of NWS data. Such fees are low compared with the fair market value of those services.

The Omnibus Budget Reconciliation Act of 1990 set fees based on the fair market value of NWS data and information. The law excluded certain information from the fee structure, such as warnings and watches, international agreements, and data for non-

profit institutions. Initially, increases in the fee were limited to $2 million annually. However, the NWS viewed fair market pricing as a significant barrier to public access to its information and received approval from the Office of Management and Budget to reset the user fee to recover only the cost of disseminating the information. Charging firms fees that are based on the fair market value of access to that information could raise $12 million over six years.

Charging for information would lessen its dissemination, but it would also encourage the production of information that was valued by customers. It is unlikely that any market-based charges would result in the general public's having substantially less access to weather reports. For example, as long as the news media are willing to pay for private forecasts, the market will demand NWS products. In addition, because the fee structure would not apply to severe-weather warnings, the safety of the general public would not be an issue. Many European nations routinely charge users for weather information provided by their satellites.

Eliminate the NOAA Weather Radio Network. A 1983 Booz-Allen consulting study pushed for the elimination of the National Oceanic and Atmospheric Administration's (NOAA's) Weather Radio Network. It argued that the private media were disseminating weather forecasts and NWS products widely and thatless than 5 percent of the population relied on the NOAA Weather Radio as their primary source of information. Eliminating the network would lower outlays measured from the 1996 funding level by $47 million during the 1997-2002 period. The savings from the 1996 funding level adjusted for inflation would be $49 million over that period.

The Administration believes that the NOAA network performs an essential public safety role that cannot be picked up easily by commercial radio. The President's 1996 budget proposed $1 million of additional funding for the operation and maintenance of new NOAA Weather Radio transmitters. The President decided to strengthen the system after a tornado took the lives of 20 people in a rural Alabama church despite a 12-minute warning issued by the Birmingham weather office. Currently, many rural areas are not covered by broadcasts of NWS weather and flood warnings. Weather radios, which have a signal receptor, automatically turn on when a warning has been issued over the Weather Radio Network. Those signals also alert weather spotters, who provide supplemental information that enables forecasters to issue more accurate and more timely warnings and advisories to the public to be on the lookout for hazardous weather. Commercial stations and transmitters do not provide that service.

DOM-17 REDUCE FEDERAL SUPPORT FOR AGRICULTURAL RESEARCH AND EXTENSION ACTIVITIES

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			From the 1996 Funding Level				
Budget Authority	170	170	170	170	170	170	1,020
Outlays	108	152	167	169	170	170	936
			From the 1996 Funding Level Adjusted for Inflation				
Budget Authority	176	181	187	193	199	205	1,141
Outlays	111	161	181	189	196	202	1,040

The Department of Agriculture (USDA) conducts and supports agricultural research and education. In particular, the Agricultural Research Service (ARS), the department's internal research arm, focuses on maintaining and increasing the productivity of the nation's land and water resources, improving the quality of agricultural products and finding new uses for them, and improving human health and nutrition. The Cooperative State Research, Education, and Extension Service (CSREES) is responsible for the cooperative state research, education, and extension programs previously run by the Cooperative State Research Service and the Extension Service. The CSREES participates in a nationwide system of agricultural research and educational program planning and coordination between state institutions and the USDA. The CSREES also takes part in the Cooperative Extension System, a national educational network that combines the expertise and resources of federal, state, and local partners. The Economic Research Service (ERS) carries out economic and other social science research and analysis for public and private decisions about agriculture, food, natural resources, and rural America.

The 1996 appropriations for these three agencies total $1.7 billion. Reducing funding levels by 10 percent would save $936 million in outlays over the 1997-2002 period measured from the 1996 funding level and $1,040 million measured from the 1996 level adjusted for inflation.

Federal funding for agricultural research may, in some cases, replace private funding. If federal funding was eliminated in those instances, the private sector could finance more of its own research. Moreover, federal funding for some extension activities under the CSREES could be reduced without undercutting its basic services to farmers. For example, funding for the Nutrition and Family Education and Youth at Risk Programs amounted to $70 million under the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act for 1996.

Opponents of reducing funding for research and extension activities argue that the programs play important roles in developing an efficient farm sector--a reduction in federal funding could compromise the sector's future development and its competitiveness in world markets. If the burden of funding was transferred to the private sector, agricultural research, which contributes to an abundant, diverse, and relatively inexpensive food supply for U.S. consumers, could decline. Moreover, some federal grants are used to improve the health of humans, animals, and plants by funding research that promotes better nutrition or more environmentally sound farming practices. If federal funding was cut back, the public might have to bear some of that cost in higher prices, forgone innovations, and environmental degradation.

DOM-18 REDUCE DEPARTMENT OF AGRICULTURE SPENDING FOR EXPORT MARKETING AND INTERNATIONAL ACTIVITIES

	Annual Savings (Millions of dollars)						Six-Year Cumulative
	1997	1998	1999	2000	2001	2002	Total
			From the 1996 Funding Level				
Budget Authority	24	24	24	24	24	24	144
Outlays	13	24	24	24	24	24	133
			From the 1996 Funding Level Adjusted for Inflation				
Budget Authority	25	26	27	28	29	30	165
Outlays	14	26	27	27	28	29	151

The Department of Agriculture (USDA) promotes exports and international activities through the programs of the Foreign Agricultural Service (FAS). For example, FAS is a partner in joint ventures with "cooperators," such as agricultural trade associations and commodity groups, to develop markets for U.S. exports. FAS also collaborates on other ventures, one of which provides training to foreign nationals with the objective of improving commercial relationships that will benefit U.S. agriculture. Eliminating funding for those programs would reduce outlays by $133 million over the 1997-2002 period measured from the 1996 funding level and by $151 million measured from the 1996 level adjusted for inflation.

The Foreign Market Development Cooperator Program, also known as the Cooperator Program, typically promotes generic products and basic commodities, such as grains and oilseeds, but the program also covers some high-value products, such as meat and poultry. Some critics argue that cooperators should bear the full cost of foreign promotions because the cooperators benefit from them directly. (How much return, in terms of market development, the Cooperator Program actually generates or the extent to which it replaces private expenditures with public funds is uncertain.) Some observers also cite the possibility of duplication because the USDA provides funding for marketing through its Market Access Program and other activities.

Eliminating the Cooperator Program, however, could place U.S. exporters at a disadvantage in international markets, depending, in part, on the amount of support other countries provide to their exporters. Responding to the issue of duplication, some advocates note that the Cooperator Program is distinct from other programs, in part because it focuses on services to trade organizations and technical assistance. People concerned about U.S. exports of generic products and basic commodities consider the program a useful tool for developing markets that could have benefits for the economy overall.

The Cochran Fellowship Program brings foreign midlevel managers to the United States for training in agriculture and agribusiness. Although the program is popular among recipients and their sponsors, its direct benefits to U.S. agriculture are unknown; thus, it may be of marginal value to taxpayers. However, eliminating the Cochran Fellowship Program could hurt U.S. agriculture to the extent that the program builds commercial relationships, introduces foreign professionals to U.S. products, and creates new opportunities for U.S. exports.

DOM-19 ELIMINATE EMERGENCY DISASTER LOANS MADE BY THE DEPARTMENT OF AGRICULTURE

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	32	32	32	32	32	32	192
Outlays	19	21	21	21	21	21	124
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	33	34	35	36	37	38	213
Outlays	20	22	23	23	24	25	137

The Farm Service Agency (FSA) of the Department of Agriculture (USDA) provides or guarantees loans to farmers who are unable to obtain private commercial credit. Farmers use the loans to purchase farms, pay for operating expenses, and offset losses from natural disasters.

Loan obligations for those purposes totaled $2.5 billion in 1995. About one-fourth of that amount was for loans made directly by the FSA using government funds (direct loans). The remaining loans were made by commercial lenders using private funds but were guaranteed by the FSA against default (guaranteed loans). The FSA also subsidizes the interest on many of the loans.

Emergency disaster loans are direct loans used to offset losses from natural disasters. They accounted for nearly $69 million of the $2.5 billion in total loan obligations in 1995. For 1996, the agricultural appropriations act authorizes the FSA to make about $100 million in emergency disaster loans. In recent years, total loans for emergency disasters have been less than the maximum amount authorized. This year, however, funds will be exhausted because an unusually large number of disasters have affected farmers.

The Congressional Budget Office's baseline assumes that the need for such loans will return to more normal levels in future years. The baseline (without adjusting for inflation) projects that the FSA will be authorized to make $109 million in loans but will make only $72 million. In the baseline adjusted for inflation, the limitation on loans for 2002 is $129 million and the corresponding projected level of loans that will be made is $85 million. The subsidy value of loans rather than their face value is what the budget records as government outlays. The loan subsidy is largely the estimated interest subsidy that the government provides plus the expected losses from defaults.

This option would eliminate the emergency disaster loan program beginning in 1997. Savings in outlays would total $124 million over the 1997-2002 period measured against the 1996 funding level and $137 million measured against the 1996 level adjusted for inflation.

The emergency disaster loan program has at times been large and expensive for the federal government. In the late 1970s and early 1980s, new loan obligations were measured in the billions of dollars--with a peak of $5.1 billion in 1981. Emergency disaster loans have a poor record of repayment. According to the General Accounting Office (GAO), which has been consistently critical of the program, over $6.1 billion in emergency loan debt was forgiven between 1989 and 1995. Future losses from the current portfolio of loans could also be large. Of the $3.0 billion outstanding at the end of 1995, the USDA reported that about 40 percent was owed by delinquent borrowers.

Many of the problems that resulted in large losses have been solved by changing lending practices as well as by simply reducing the value of new loans being made. Nevertheless, the program continues to pose the risk of substantial costs. Eliminating new loans, as this option proposes, would not solve the problems of the existing portfolio, but it would cut costs in the future.

Proponents of eliminating the program cite its high cost--the program is expensive not only because of relatively high defaults but also because interest rates are subsidized. Proponents also argue that farmers should be buying a sufficient amount of insurance to indemnify their losses rather than borrowing from the government when such losses occur. GAO reports that nearly 96 percent of loans made in recent years were because of crop losses. Although federally supported crop insurance coverage was available for nearly all of those losses, about one-half of the farmers who suffered them had obtained no such coverage. Current law requires that farmers who receive loans be insured, but GAO reports that the requirement has routinely been waived.

Supporters of the current program argue that, in addition to insurance, loans are sometimes needed to help farmers recover from disaster because some farmers, especially those with limited resources, could have trouble getting commercial credit. The federal emergency disaster loans were designed particularly for that group. Without such loans or other assistance, those farmers might not be able to remain in business.

This option was recommended in the September 1995 report of the National Performance Review and was included in the President's budget for 1997. Both of those documents cite the relatively high delinquency rate in the program and improvements in federal crop insurance as reasons for eliminating emergency disaster loans.

DOM-20 END SMALL BUSINESS ADMINISTRATION LOANS AND LOAN GUARANTEES

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
End All Credit Programs							
From the 1996 Funding Level							
Budget authority	480	490	502	512	523	535	3,042
Outlays	295	456	497	507	518	529	2,802
From the 1996 Funding Level Adjusted for Inflation							
Budget authority	494	528	577	640	723	837	3,799
Outlays	304	484	555	611	685	784	3,423
Keep Disaster Programs							
From the 1996 Funding Level							
Budget authority	212	216	221	225	230	235	1,339
Outlays	140	203	219	223	228	233	1,246
From the 1996 Funding Level Adjusted for Inflation							
Budget authority	218	228	241	254	267	281	1,489
Outlays	144	213	236	249	262	275	1,379

The Small Business Administration (SBA) provides both direct loans and loan guarantees to qualified small businesses. The SBA's lending objectives are to promote business development generally, aid economically disadvantaged groups, and assist small businesses and homeowners in recovering from disasters. Eliminating all SBA loan and loan guarantee programs would reduce outlays by $2.8 billion over the 1997-2002 period measured against the 1996 funding level and by $3.4 billion relative to the 1996 level adjusted for inflation. An alternative to eliminating all loans would be to retain only those that provided assistance to disaster victims. Continuation of those programs could be justified as aid to the economically disadvantaged because of factors beyond their control. Following that course could reduce SBA outlays by $1.2 billion over the 1997-2002 period measured against the 1996 funding level and by $1.4 billion relative to the 1996 level adjusted for inflation.

Those estimates assume that the SBA would continue to fund various business education and training programs. In addition, the SBA would still have responsibilities for managing its loan portfolio, including liquidations and possibly loan asset sales. The estimates project a decline in the administrative costs of managing the portfolio over the 1997-2002 period as the loans mature and expire.

Under the loan guarantee program, the federal government guarantees 80 percent of the principal for business loans up to $100,000 and 75 percent of the principal for larger ones. The interest rate on guaranteed loans is about 2.5 percentage points above the prime rate; in addition, the SBA guarantee has a charge of between 2 percent and 4 percent of the amount guaranteed. In 1995, the SBA guaranteed over 56,000 loans totaling more than $9.4 billion; its share of the guaranteed loans was roughly $7.7 billion. Holders of over 2,500 guaranteed loans de-

faulted in 1995, and the loans were subsequently purchased by the SBA. The Small Business Administration's share of the outstanding balances of those loans exceeded $438 million.

Under the direct loan program, the SBA provides loans to businesses located in low-income or high-unemployment areas and to businesses owned by minorities, handicapped individuals, and Vietnam veterans or disabled veterans. It also offers direct loans to homeowners recovering from natural disasters. Direct loans generally do not exceed $150,000, although some disaster loans run as high as $500,000. In 1995, the SBA approved over 39,000 direct loans totaling $1.3 billion, bringing its total direct loan portfolio to more than $7.3 billion. In both the direct loan and loan guarantee programs, the SBA extends credit for up to 25 years--a significantly longer term than would otherwise be available to small businesses.

SBA assistance is favored by people who view it as a way of aiding small businesses, which, they argue, generally create more jobs, improve technology more rapidly, and satisfy some markets more efficiently than do large firms. When banks and other traditional sources of loans to small businesses tighten credit standards or become more conservative in their lending practices, SBA assistance can help to fill a financing gap.

But other people claim that SBA assistance tends to flow to the firms least likely to create stable employment, improve technology, or enhance national productivity. SBA loans and loan guarantees go primarily to businesses that have been rejected by conventional providers of financing. Perhaps as a result, they have a high default rate. It can also be argued that financial markets are now more efficient and less susceptible to the types of market failure that justified the SBA program when it began.

DOM-21 REDUCE THE BUDGET OF THE EXPORT ADMINISTRATION

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			From the 1996 Funding Level				
Budget Authority	10	10	10	10	10	10	60
Outlays	8	9	10	10	10	10	57
			From the 1996 Funding Level Adjusted for Inflation				
Budget Authority	10	11	11	11	12	12	67
Outlays	9	10	11	11	11	12	64

The Export Administration (EA) of the Department of Commerce enforces U.S. export laws to promote national security and foreign policy objectives. Its activities include ensuring availability of industrial resources for U.S. defense, licensing exports, and detecting and preventing foreign distribution of U.S. goods and technical data that are controlled for reasons of national security or foreign policy. Reducing the budget of the Export Administration by 25 percent would save $8 million in outlays in 1997 and $57 million over six years measured from the 1996 spending level. It would save $9 million in 1997 and $64 million over six years measured from the 1996 spending level adjusted for inflation.

The enforcement activities of the EA diminish U.S. exports and thereby create economic inefficiencies that reduce U.S. gross national product. To the extent that they keep defense-related goods and technology out of the hands of potential adversaries, however, they promote U.S. security and foreign policy. The EA's activities to ensure availability of industrial resources (such as restricting foreign ownership of U.S. firms that are deemed to be defense-related) also have their economic efficiency costs and corresponding national security and foreign policy benefits.

With the demise of the former Soviet Union, many people believe that restrictions on exports can safely be eased, but agreement is lacking about how much. The members of the Coordinating Committee on Multilateral Export Controls (COCOM) have disbanded the group and replaced it with the Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies. In contrast to COCOM, the Wassenaar Arrangement includes the Russian Federation and some other former Eastern Bloc countries as parties. Those circumstances would seem to indicate that the budget for the EA can safely be cut. Concern remains, however, about the possible development of weapons of mass destruction by rogue governments in the developing world. That worry has been highlighted by the debate in recent years over the proper U.S. policy with regard to North Korea's nuclear program and by the post-Persian Gulf War disclosures of Iraq's progress in developing and obtaining the technology and materials for nuclear, chemical, and biological weapons. Further uneasiness springs from questions about the continuing stability of the Russian government and the possibility of its falling into the hands of parties hostile to the United States.

The Congress has been wrestling for six years with the issue of updating U.S. export control law. Funding levels for the EA are inextricably linked to resolution of that issue. The 25 percent cut discussed above is an arbitrary figure chosen to illustrate the order of magnitude of budgetary savings that could be involved. The Congressional Budget Office has not judged whether, in fact, any of the updates of the law proposed over the past six years would make a 25 percent cut feasible or whether such a cut is consistent with U.S. obligations under the Wassenaar Arrangement.

DOM-22 REDUCE COSTS OF THE ITA BY ELIMINATING TRADE PROMOTION ACTIVITIES OR CHARGING THE BENEFICIARIES

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			From the 1996 Funding Level				
Budget Authority	183	183	183	183	183	183	1,098
Outlays	128	165	183	183	183	183	1,025
			From the 1996 Funding Level Adjusted for Inflation				
Budget Authority	189	195	202	209	216	223	1,234
Outlays	132	175	199	206	213	220	1,145

The International Trade Administration (ITA) of the Department of Commerce has four direct program activities: the Import Administration, which investigates antidumping and countervailing-duty cases; the trade development program, which assesses the competitiveness of various U.S. industries and runs various export promotion programs; the international economic policy program, which develops policy, provides marketing services, and identifies and develops remedies for long-range trade and investment problems; and the U.S. and foreign commercial services, which counsel U.S. businesses on exporting. The latter three activities also help fight foreign barriers to U.S. exports. That effort, and perhaps the effort against foreign subsidies, may be necessary to maintain public support for free-trade policies, and in some cases they can be defended on economic grounds. The ITA's export promotion, marketing, and counseling could be eliminated, however, or the beneficiaries could be charged fees to pay more of the costs.

Eliminating those activities or charging firms for their cost would reduce outlays or increase receipts by $128 million in 1997 and by $1.0 billion over six years measured from the 1996 funding and receipt levels. The option would reduce outlays or increase receipts by $132 million in 1997 and by $1.1 billion over six years measured from the 1996 levels adjusted for inflation.

One might argue that such activities were better left to the firms and industries involved rather than to the ITA. Alternatively, one could argue that there might be some economies of scale to those activities, especially for small firms. If so, having one entity (the federal government) counsel exporters on foreign legal and other requirements, disseminate knowledge of foreign markets, and promote U.S. products abroad could make sense. In that case, net federal spending could be reduced by charging the beneficiaries of those programs their full cost.

However, fully funding ITA's trade promotion activities through charges that are voluntary for all beneficiaries may not be possible. For example, in many cases it may be impossible to promote the products of only selected firms in a given industry that want and pay for such promotion without at the same time encouraging demand for the products of all other firms in the industry. In those circumstances, all of the firms have an incentive not to purchase the services because they know that they are likely to receive the benefits whether they pay for them or not. Consequently, if the federal government wanted to charge beneficiaries for the ITA's services, it might have to require that all firms in an industry (or the industry's national trade group) decide together whether to purchase the ITA's services. If the firms decided to purchase them, all firms in the in-

dustry would be required to pay according to some equitable formula.

When beneficiaries are not charged the full cost of services, the ITA's activities effectively subsidize the industries involved. Those implicit subsidies are an inefficient means of helping the industries because they are partially dissipated to foreigners in the form of lower prices for U.S. exports. Because the current-account balance is determined by total saving and investment in the U.S. economy, over which the ITA has no influence, the agency's activities do not improve the current-account balance. As a result of the changes they cause in exchange rates and other variables, all increases in exports resulting from the ITA's activities are completely offset by some mix of reduced exports in other industries and increased imports. Thus, other U.S. firms are hurt by the export promotion activities of the ITA.

DOM-23 ELIMINATE THE ADVANCED TECHNOLOGY PROGRAM

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
	From the 1996 Funding Level						
Budget Authority	218	221	221	221	221	221	1,323
Outlays	22	77	165	220	221	221	926
	From the 1996 Funding Level Adjusted for Inflation						
Budget Authority	225	234	241	248	255	262	1,465
Outlays	22	80	173	235	242	249	1,001

Eliminating the Advanced Technology Program (ATP) of the Department of Commerce would save $926 million in outlays over the next six years measured against the 1996 funding level and $1 billion relative to the 1996 level adjusted for inflation. Funding current project awards to completion would reduce those savings by $309 million.

The Omnibus Trade and Competitiveness Act of 1988 established the ATP within the Commerce Department's National Institute of Standards and Technology. The objective of the ATP is to further the competitiveness of U.S. industry by helping convert discoveries in basic research more quickly into technological advancements with commercial potential. The program awards research and development (R&D) grants on the basis of merit to individual companies, independent research institutes, and joint ventures. The grants support research in generic technologies that have applications to a broad range of products, as well as precompetitive research (preceding product development).

The ATP's grants are limited to $2 million over a three-year period when awarded to a single firm, but they have no dollar limit when awarded to a joint venture over a period of up to five years. However, joint ventures must pay at least half of the R&D costs of each project, which acts as a check on a project's commercial viability. The program received its first appropriation, of $10 million, in 1990; by 1994, its appropriation had grown to $200 million. As of the end of 1993, the ATP had selected 89 projects and committed $241 million in funding. The amount of committed funds more than doubled in 1994 as an additional $307 million was awarded to 88 projects. In 1995, $382 million was awarded to 99 projects.

It is too early to determine the commercial success of projects funded by the ATP because even after a project has ended, more research is required for product development and commercialization. As of September 1993, according to a report by the General Accounting Office (GAO), only four projects had ended (the ATP no longer funds them), and each was deemed successful in that the technology examined was found to be feasible. However, two of those projects were experiencing some difficulties with commercialization. Between September 1993 and April 1995, eight more projects were completed.

Opponents of the program argue that the near tripling of its funding between 1993 and 1994 (from $68 million to $200 million) could have lowered the average quality of winning R&D projects. (If the applicant pool does not increase as dramatically as the program's funding, the award process is likely to be less competitive.) Opponents also question whether the federal government is capable of picking projects with the most potential for technological and commercial success. They note that projects that stand out as clear "winners" might have been funded by the private sector in any case. One privately funded study of the 11 projects supported by the first

competition in 1990 suggests that as many as half of them would probably have been undertaken even without ATP support, although at a lower level of funding. A recent GAO survey brings additional evidence to bear. GAO questioned 89 winners and 34 near-winners that applied for ATP funding between 1990 and 1993. Half of the near-winners continued their R&D projects despite a lack of ATP funding. Of the winners, 42 percent said that they would have continued with their project even without ATP funding, and 41 percent said they would not.

The program's supporters cite evidence from the GAO survey suggesting that the ATP encourages the formation of joint ventures, which increases cooperation among firms and between firms and academic institutions. GAO found that 26 of 34 joint-venture applicants awarded ATP funding had not worked together previously. Proponents of the program also point to the benefits of the ATP's support for research on generic technologies. Firms do not invest heavily in such studies because they cannot fully appropriate the benefits for themselves. (For example, generic technologies are likely to have applications to products developed later by firms that did not invest in the original research.) Because, say advocates, the incentive for firms to invest in that type of research is weak and produces less investment than is socially optimal, government support is desirable.

DOM-24 ELIMINATE THE MANUFACTURING EXTENSION PARTNERSHIP AND THE NATIONAL QUALITY PROGRAM

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	80	83	83	83	83	83	495
Outlays	8	28	37	82	83	83	321
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	82	88	90	93	96	98	547
Outlays	8	29	64	88	91	93	373

The Manufacturing Extension Partnership (MEP) and the National Quality Program reside, along with the Advanced Technology Program (see DOM-23), in the National Institute of Standards and Technology, which is part of the Department of Commerce. MEP consists primarily of a network of manufacturing extension centers that assist small and midsize manufacturing businesses with expertise in the latest management practices and manufacturing techniques, and provide other relevant business knowledge. The centers are nonprofit organizations that are not owned by the federal government but are partly funded by it. Other funding comes from state and local governments, fees for services, and contributions from industry. The National Quality Program consists primarily of the Malcolm Baldridge National Quality Award, which is given to firms for achievements in quality in three categories: manufacturing, service, and small business.

Eliminating MEP and the National Quality Program would reduce outlays by $8 million in 1997 and by $321 million over six years measured from the 1996 funding level. It would reduce outlays by $8 million in 1997 and by $373 million over six years measured from the 1996 level adjusted for inflation.

The Manufacturing Extension Partnership. Proponents of MEP point to the economic importance of small and midsize firms and their need for management and manufacturing expertise. Small and midsize manufacturing concerns produce more than half the total value of U.S. production and employ two-thirds of U.S. manufacturing workers. Yet a 1993 report by the National Research Council found that many small firms were operating substantially below their potential. Small firms, it is argued, generally cannot afford to maintain in-house the expertise that MEP provides. Those circumstances and the substantial reliance of larger manufacturing firms on small and midsize companies for various supplies and intermediate goods lead proponents of the program to contend that MEP is needed for U.S. competitiveness in international markets.

Opponents cite several counterarguments. First, the contention about general U.S. competitiveness, they claim, is misleading at best. International trade is determined by comparative, not absolute, advantage. Thus, increases in productivity from MEP cannot create an economywide gain in international competitiveness. Firms that are helped by MEP may see their competitiveness improve, resulting in more exports or fewer competing imports. But the alterations that then occur in the demand for the dollar in foreign exchange markets will cause movements in the exchange rate that will decrease the exports of other U.S. firms and increase competing imports for other firms. The balance of trade will not shift--it can be affected only by changes in such macroeconomic variables as aggregate saving and investment.

Second, opponents question the contention that small manufacturing firms need the government to provide technical assistance. MEP began in 1989; small manufacturing firms thrived long before then, in part because other sources of expertise have been available. For example, many professors of business, science, and engineering are also consultants to private industry, and other ties between universities and private firms facilitate the transfer of knowledge and expertise.

Federal spending for MEP constitutes a subsidy for the firms that are helped by MEP's services. In most cases, subsidies are inefficient: they cause firms to produce products for which the costs of production, including the cost of management and other overhead, are greater than the value of the product as reflected by its price. Furthermore, not all of the benefits of MEP go to U.S. firms and citizens. In the case of small businesses that increase their exports because of MEP's implicit subsidy, part of the subsidy probably goes to foreign customers in the form of lower prices for the products being sold.

The National Quality Program. Advocates defend the National Quality Program with arguments similar to those for MEP--namely, the program's services increase the international competitiveness of U.S. firms. But opponents maintain that the arguments for the National Quality Program are even weaker than those for MEP. First, businesses need no added incentive to maintain quality--pressure from consumers of their products already provides that encouragement. If lost sales and consequent financial losses are insufficient to impel a firm to maintain or increase the quality of its products, the Malcolm Baldridge Award is unlikely to do so. Second, the same argument about comparative rather than absolute advantage that was applied to MEP also applies to the National Quality Program. Better-quality products can increase the international competitiveness of some U.S. firms but only at the expense of reduced competitiveness for others.

Third, winners of the Baldridge Award frequently mention it in their advertising. That means that firms value the award. If so, they should be willing to pay large enough fees to enter the contest that federal funding of the award could be eliminated.

DOM-25 ELIMINATE NEW FUNDING FOR THE RURAL RENTAL HOUSING ASSISTANCE PROGRAM

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	110	110	110	110	110	110	660
Outlays	10	70	80	90	90	100	440
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	110	110	120	120	120	130	710
Outlays	10	70	90	90	100	110	470

NOTE: Figures in the table exclude savings in administrative costs.

The Section 515 housing program, administered by the Rural Housing and Community Development Service (RHCDS), provides low-interest, 50-year mortgage loans to developers of multifamily rental projects in rural areas. Those mortgages typically have credits that reduce the effective interest rate to 1 percent and, in turn, lower rental costs for Section 515 tenants.

Under current rules, assisted tenants pay rent equal to the greater of 30 percent of their adjusted income or the minimum project rent. (The minimum project rent for each unit consists of a proportionate share of the amortization costs of the 1 percent mortgage and the project's operating expenses.) The owner of the housing project keeps the minimum rent, and the RHCDS collects any payments above it. Many of the poorest tenants receive additional federal subsidies through the Rural Rental Assistance Payments (RRAP) program, which reduces their rent payments to 30 percent of their income. During 1995, the Section 515 program made $183 million worth of new loans to finance about 2,850 new rental units.

Eliminating all new commitments for assistance under the Section 515 program would reduce federal outlays by about $440 million over the 1997-2002 period measured from the 1996 funding level; that calculation includes $45 million in lower RRAP payments. Savings from the 1996 funding level adjusted for inflation would amount to $470 million over the same period. Additional savings would be realized over time as the cost of administering a shrinking loan portfolio dropped.

Arguing in favor of this option is the inappropriateness of expanding rural rental assistance at a time when many other federal programs are being cut. Also, turnover among current residents of existing projects would ensure that some new income-eligible families would be assisted each year. This option, however, would reduce the proportion of rural families being assisted as the number of eligible families continued to grow. Moreover, growth in the supply of standard-quality, low-income rental projects in rural areas would slow.

DOM-26 SCALE BACK THE HOUSING LOAN PROGRAM FOR RURAL HOMEOWNERS

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			Eliminate New Direct Loans				
From the 1996 Funding Level							
Budget authority	145	145	145	145	145	145	870
Outlays	120	145	145	145	145	145	845
From the 1996 Level Adjusted for Inflation							
Budget authority	150	155	160	165	170	175	975
Outlays	125	150	155	160	165	170	925
			Increase Borrowers' Payments to 30 Percent of Income				
From the 1996 Funding Level							
Budget authority	1,995	260	250	245	240	235	3,225
Outlays	1,940	265	250	245	240	235	3,175
From the 1996 Funding Level Adjusted for Inflation							
Budget authority	2,005	280	270	275	280	280	3,390
Outlays	1,945	280	270	270	275	280	3,320

NOTE: Figures in the table exclude savings in administrative costs.

The Section 502 housing program, administered by the Rural Housing and Community Development Service (RHCDS), provides subsidized mortgages to low-income rural borrowers, many of whom live in areas that have a shortage of private mortgage funds. Generally, eligible borrowers may purchase homes by agreeing to pay a minimum percentage of their income to cover principal, interest, property taxes, and insurance for the full term of the loan, usually 33 years. In the past, that percentage of income was 20 percent, but for new borrowers today, it ranges from 22 percent to 26 percent, depending on the borrower's income. The effective interest rate on loans can amount to as little as 1 percent. The federal cost of the program includes the difference between the RHCDS's cost of borrowing and the lower interest rates it charges homeowners, as well as the costs associated with any future defaults on the loans. During 1995, roughly 21,500 rural households with income averaging about $17,000 purchased single-family homes with loans from the RHCDS at reduced rates of interest. The total value of all new Section 502 direct loans in 1995 was $930 million.

The costs of this program could be cut by eliminating new lending or increasing borrowers' payments. Those options would reduce the present value of the mortgage interest subsidies and the cost of future defaults, which under credit reform are figured as outlays in the year the loans are made.

Eliminate New Lending. If new direct loans under the Section 502 program were eliminated, federal outlays would be reduced by $845 million over the 1997-2002 period compared with the 1996 funding level. Savings from the 1996 level adjusted for in-

flation would amount to $925 million over the period. The federal government would realize additional savings over time as the federal cost of administering the shrinking loan portfolio decreased.

Supporters of this option suggest that the current program may not be the best use of scarce federal resources. It makes sizable payments to relatively few households that have low income but that are better off than many households receiving no assistance. If this option was enacted, however, many low-income rural households would face added difficulties in both finding sources of lending and affording the interest rates they would be charged.

Increase Borrowers' Payments to 30 Percent of Income. Continuing the same dollar volume of new lending but increasing borrowers' payments to 30 percent of income would reduce federal outlays by about $3.2 billion in the 1997-2002 period compared with the 1996 funding level. Savings from the 1996 level adjusted for inflation would amount to $3.3 billion over the period. The option assumes that the increase in payments would be effective immediately for new borrowers and be phased in over a period of up to 10 years--at 1 percentage point per year--for current borrowers. Annual savings from this option exceed those from eliminating new lending because the increased payments by borrowers would exceed the federal cost of the program. The reason is mainly that the cost of federal borrowing is estimated to be relatively low during the 1997-2002 period.

Increasing the percentage of income that borrowers paid for RHCDS loans would reduce the disparity between the RHCDS's Section 502 program and home ownership programs sponsored by the Department of Housing and Urban Development. Under the Homeownership and Opportunity for People Everywhere program, for example, home buyers pay 30 percent of their income for principal, interest, property taxes, and insurance. This option would also eliminate the unequal treatment of assisted homeowners and renters, who generally pay 30 percent of their adjusted income for housing (but who would pay 35 percent under the option described in DOM-60).

Increasing the percentage of income that rural households paid toward home ownership, however, would be likely to produce a shift in the composition of new borrowers away from households with the lowest income. Those households might have difficulty paying such a high percentage of their income for housing and would not qualify for loans under current underwriting standards. In addition, higher costs relative to income might raise default rates among current borrowers. Historically, the foreclosure rate has been around 2.5 percent.

DOM-27 REDUCE FEDERAL AID FOR MASS TRANSIT

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority[a]	2,516	2,568	2,620	2,673	2,728	2,784	15,889
Outlays	322	736	1,122	1,389	1,614	1,688	6,871
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority[a]	2,537	2,611	2,684	2,759	2,836	2,916	16,343
Outlays	332	768	1,187	1,496	1,773	1,898	7,454

a. Budget authority includes mandatory contract authority specified in law.

In 1996, the principal federal transit assistance programs will provide about $3.5 billion in capital grants and about $0.5 billion in operating assistance to local mass transit agencies. Federal grants generally pay 80 percent of the costs of qualifying capital projects and offset up to 50 percent of local transit system operating deficits. In 1991, federal capital grants accounted for about 55 percent of all public capital spending for mass transit, and federal operating subsidies offset roughly 5 percent of the operating costs of transit systems nationwide.

Reducing the federal share of costs for qualifying investments in mass transit to 50 percent (as well as reducing funding by a corresponding amount) and eliminating operating assistance would save $322 million in 1997 and $6.9 billion over the 1997-2002 period measured from the 1996 funding level. Measured from the 1996 level adjusted for inflation, savings would be $332 million in 1997 and $7.5 billion over the six-year period.

Proponents of this option point out that the large federal shares of investment spending and the subsidies for operating assistance appear to have had little effect on either transit productivity or the use of mass transit services. Despite modernization of transit systems, only 5.5 percent of journeys to or from work are made by mass transit. Transit agencies serve mainly downtown areas, whereas most of the growth in urban travel has been in the suburbs. At the same time, inflation-adjusted labor costs per mile of transit travel rose by 60 percent during the 1970s, when overall assistance levels were highest. Reducing the federal share of capital costs for mass transit might improve local investment choices, as a similar reduction seems to have done in the case of federal subsidies for construction of local wastewater treatment plants. Similarly, ending operating assistance could encourage local authorities to make better use of existing capital by improving services, using more cost-effective, smaller vehicles, or taking other steps to lower the operating costs of transit services.

Opponents argue, however, that reducing federal transit subsidies could harm some local transit services. The burden of diminished services would be borne disproportionately by people who were especially dependent on public transportation: the poor, the young, the elderly, and the disabled. Moreover, any reduction in transit service would occur just as the Clean Air Act of 1990 and the Intermodal Surface Transportation Efficiency Act of 1991 were placing increased pressure on states and localities to reduce their reliance on automotive transportation. Finally, an across-the-board cut in transit subsidies would be less efficient than targeted reductions, since certain transit investments, such as the rehabilitation of rail transit in older cities, could have a higher payoff.

DOM-28 ELIMINATE THE INTELLIGENT TRANSPORTATION SYSTEMS PROGRAM

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority[a]	204	204	204	204	204	204	1,224
Outlays	35	141	171	181	188	194	910
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority[a]	210	216	222	228	235	241	1,352
Outlays	36	146	182	197	209	221	991

a. Budget authority includes mandatory contract authority specified in law.

The Intelligent Transportation Systems (ITS) program is a research, development, testing, evaluation, and deployment program to improve travel on mass transit and highways by using advanced computer, communications, and sensor technologies. It was authorized under the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA).

The Congress provided $222.8 million for the ITS program in 1996, a 2.1 percent decrease from 1995. If the program was eliminated (and unobligated balances rescinded), budgetary savings would be $35 million in 1997 and $910 million over the 1997-2002 period compared with the 1996 funding level. Savings would be $36 million in 1997 and $991 million over the 1997-2002 period compared with the 1996 level adjusted for inflation.

By sponsoring substantial research and development and operational tests, the ITS program has helped make state and local officials aware of high-tech solutions to transportation problems. For example, using advanced technologies to speed the flow of traffic is far less costly than constructing additional roadways. Federal highway officials estimate that equipping one mile of freeway with electronic traffic surveillance costs about $1 million, but constructing one mile of urban freeway costs about $40 million. Eliminating the ITS program risks cutting short research and testing that could yield large savings in highway and transit costs.

The federal ITS program has been criticized, however, for a scattershot approach to project funding and for not sufficiently evaluating the results of its research and identifying the most promising applications. Moreover, decisions about whether to adopt new transportation technologies lie primarily with state and local officials and with the private sector, and those parties have greater incentives than the federal government does to pursue applications that offer the greatest savings in costs.

Eliminating the ITS program as a separate activity would not necessarily mean eliminating ITS projects. It would merely put those projects into competition with other transportation research efforts. One variation on this option would be to retain some of the existing ITS funding but transfer it to the general highway research and development account. Total savings for this option would be reduced by the amount of any such transfer.

DOM-29 ELIMINATE THE OPERATING SUBSIDY FOR AMTRAK

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			From the 1996 Funding Level				
Budget Authority	170	170	170	170	170	170	1,020
Outlays	170	170	170	170	170	170	1,020
			From the 1996 Funding Level Adjusted for Inflation				
Budget Authority	175	180	185	190	196	201	1,127
Outlays	175	180	185	190	196	201	1,127

Eliminating the operating subsidy for the National Railroad Passenger Corporation (also known as Amtrak) could result in savings of $170 million in 1997 and $1.0 billion over the 1997-2002 period measured from the 1996 funding level. Measured from the 1996 level adjusted for inflation, savings would be $175 million in 1997 and $1.1 billion over the six-year period. The federal government provides Amtrak with subsidies of about $170 million a year for operating expenses, in addition to $135 million for mandatory passenger rail service payments, $215 million in capital grants, and $115 million for the Northeast Corridor Improvement Program.

When the Congress established Amtrak in 1970, it expected to provide subsidies only for a limited time, until Amtrak could become self-supporting. Instead of declining, however, federal subsidies rose steadily in the 1970s to nearly $1 billion in 1981. The Administration then proposed substantial cuts in federal funding. Amtrak subsequently raised fares and reduced costs, and subsidies have declined. Eliminating the operating subsidy would force Amtrak to intensify its efforts to cut costs and expand revenues.

Proponents of cutting subsidies argue that passenger rail service should compete on a level playing field with other modes of transportation--without the advantage of federal subsidies. Rail service in that case would have to become more efficient. Proponents also question the fairness of subsidizing the travel of business people, who make up a substantial share of Amtrak's passengers.

Opponents of cutting subsidies say that reducing federal support would lead Amtrak to cancel service on lightly traveled routes and that passengers in those areas might not have alternative transportation available. They also note that subsidizing rail service in congested areas may be justified as a way of offsetting the costs of congestion in travel by highway or air. Retaining federal subsidies for the Northeast Corridor Improvement Program may help to redress that imbalance. Finally, some Amtrak supporters claim that in the absence of operating subsidies, the entire system would have to shut down. If bankruptcy occurred, it is unclear what role the federal government would play in paying off Amtrak's liabilities, such as labor protection payments. In addition, because Amtrak contributes to the Railroad Retirement system, bankruptcy could hamper payments to current retirees. The estimates provided for this option do not include any potential impact for associated labor costs.

DOM-30 ELIMINATE AIRPORT GRANTS-IN-AID

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority[a]	2,280	2,347	2,412	2,480	2,549	2,621	14,689
Outlays	261	870	1,175	1,320	1,392	1,392	6,410
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority[a]	2,280	2,347	2,412	2,480	2,549	2,621	14,689
Outlays	269	904	1,243	1,428	1,543	1,586	6,973

a. Budget authority is mandatory contract authority specified in law.

Under the Airport Improvement Program (AIP), the Federal Aviation Administration (FAA) provides airports with grants for expanding capacity and improving terminals. About half of the grant money is apportioned by formula. The other half is considered discretionary, although the Congress has imposed some restrictions on its allocation. Over the past decade, about two-thirds of AIP funding has gone to primary, commercial service airports; about one-quarter has gone to general aviation and reliever airports; and the rest has been divided among other special programs. Eliminating those grants would result in savings of $261 million in 1997 and about $6.4 billion over the 1997-2002 period measured from the 1996 funding level. Measured from the 1996 level adjusted for inflation, savings would be $269 million in 1997 and nearly $7 billion over the six-year period.

Recent trends in aviation have increased the importance of larger airports (as measured by the number of embarking passengers). If airport grants were eliminated, those airports would have little trouble financing capital improvements from the fees they collect or the additional bonds they could issue. In 1991, the Congress passed legislation allowing airports to levy passenger facility charges of up to $3 per passenger. By the end of 1995, the FAA had approved such charges at more than half of the eligible major airports. Those charges can supplement the revenues received from concessionaire rents, landing fees, and airline lease payments and, unlike federal grants, can be used to pay the interest on bonds issued by the airport. In 1995, passenger facility charges yielded revenues of about $1 billion.

Small reliever airports have been financed by the FAA in the expectation that they would draw general aviation aircraft away from major airports. To date, they have not done so. Thus, some critics would argue against providing federal subsidies to those airports.

Supporters of the current program argue that the benefits provided by the system of airports are nationwide in scope. They also argue that more assistance is needed to overcome airport congestion and to allow airports to construct new gates and terminals. Those improvements will promote competition among airlines, with benefits accruing to passengers.

DOM-31 ELIMINATE THE ESSENTIAL AIR SERVICE PROGRAM

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
	From the 1996 Funding Level						
Budget Authority[a]	39	39	40	41	42	43	244
Outlays	18	23	23	23	23	23	133
	From the 1996 Funding Level Adjusted for Inflation						
Budget Authority[a]	39	39	40	41	42	43	244
Outlays	19	24	24	25	26	27	145

a. Budget authority is mandatory contract authority specified in law.

The Essential Air Service (EAS) program was created by the Airline Deregulation Act of 1978 to continue air service to communities that had received federally mandated air service prior to deregulation. The program provides subsidies to air carriers serving small communities that meet certain criteria. Subsidies currently support air service to 72 communities exclusive of Alaska, to which separate rules apply, with about 600,000 passengers served annually. The subsidy per passenger ranges from $4 to nearly $404. The Congress has directed that such subsidies not exceed $200 unless the community is more than 210 miles from the nearest large or medium-size hub airport.

Program outlays for 1995 were $29 million. The Congress has reduced the appropriation to $22.6 million for 1996. If the program was eliminated, budgetary savings would be $18 million in 1997 and $133 million over the 1997-2002 period measured against the 1996 funding level, and $19 million in 1997 and $145 million over the 1997-2002 period measured against the 1996 level adjusted for inflation. To mitigate disruptions from eliminating the program, it could be phased out over several years. Total budgetary savings would depend on the speed of the phaseout.

Critics of the EAS program contend that the subsidies are excessive, providing air transportation at a high cost per passenger. They also maintain that the program was intended to be transitional and that the time has come to phase it out. Air transportation to small communities is not a vital part of the national transportation system. If states or communities derive benefits from that service, they could provide subsidies themselves. The Congress has called for states, local governments, and other entities to begin pursuing cost-sharing mechanisms in anticipation of a cost-sharing requirement of 50 percent in 1997.

Supporters of the subsidy program claim that it prevents the isolation of rural communities that would not otherwise receive air service. Subsidies are not available for service to communities located less than 70 miles from a large or medium-size hub airport (except in Alaska). The availability of airline transportation is an important ingredient in the economic development of small communities. Without continued air service, according to some proponents, some towns might lose a sizable portion of their economic base.

DOM-32 ELIMINATE NASA'S SUPPORT FOR PRODUCERS OF COMMERCIAL AIRLINERS

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	311	415	415	415	415	415	2,386
Outlays	140	296	385	409	414	415	2,059
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	324	440	453	465	478	492	2,652
Outlays	146	311	413	449	467	481	2,267

The National Aeronautics and Space Administration (NASA) funds the development of technology and systems intended for use in commercial airliners--both subsonic and supersonic--with the explicit objective of preserving the U.S. share of the current and future world airliner market. Eliminating NASA's Advanced Subsonic Technology and High-Speed Research Programs would reduce outlays by $140 million in 1997 and $2.1 billion from 1997 through 2002 measured against the 1996 funding level. Measured against the 1996 level adjusted for inflation, outlays would be reduced by $146 million in 1997 and by $2.3 billion from 1997 through 2002.

The industry that produces large commercial aircraft is among the nation's most significant when measured by value of shipments, employment, or export sales. Two U.S. firms, Boeing and McDonnell Douglas, account for all of the nation's final sales of large commercial aircraft, but many other aerospace and nonaerospace businesses supply components to those firms. Along with the European-based Airbus Industrie, the two U.S. producers dominate the world market for large commercial aircraft (although McDonnell Douglas's share is significantly smaller than Boeing's).

NASA holds that the federal support offered in its Advanced Subsonic Technology Program--$170 million in 1996--is necessary to maintain the current U.S. share of the global market for subsonic aircraft. Among the key elements of the program are the testing of improved electronic controls and components under actual flight conditions and the developing and testing of new technologies that will allow continued operation of aging jet aircraft. The High-Speed Research effort funded at $246 million in 1996 is a second conduit of support for the producers of commercial airliners. The program has two phases. Phase I is devoted to developing technologies that mitigate the atmospheric and noise effects of supersonic flight. Phase II, a cooperative venture with U.S. industry, is devoted to "high-leverage" technologies necessary for the economic viability of future supersonic commercial jet airplanes. NASA justifies the supersonic part of its aeronautical research and technology program the same way it justifies the program's subsonic component: the agency needs to support U.S. businesses that produce large commercial aircraft for the world market.

The case for eliminating federal support to U.S. producers of commercial airliners rests on the notion that the applied and systems-oriented research and development (R&D) necessary to maintain the U.S. market share is a private rather than a public responsibility. The owners and employees of aircraft companies benefit from success in the world market; accordingly, they should shoulder the burden of paying for the R&D necessary to produce better aircraft. The facts that the investments needed to develop, produce, and market a new commercial aircraft are very large--$8 billion to $10 billion by some estimates--and that the development of new aircraft

requires many years should have little bearing on whether the public or private sector pays the cost of producing the necessary technologies.

Although a case can be made for federal support of R&D that ultimately benefits private businesses and is consistent with an economically efficient allocation of resources, it applies only weakly, or not at all, to the production of large aircraft. The benefits from the R&D supported by the NASA programs in question fall almost exclusively to aircraft manufacturers, their suppliers, and airlines. Left to their own devices, those parties should spend enough on the type of R&D supported by the NASA programs to leave society and themselves in the best position possible. Moreover, the type of research that is likely to be underfunded from society's point of view is supported by other NASA spending on aeronautical research and technology--$490 million in 1996.

The case for continued support of these programs is based largely on the unique competitive features of the market for large commercial aircraft. The United States and the European Union are parties to a bilateral agreement permitting public support for the development of commercial airliners. If the federal government failed to grant U.S. producers support comparable to that being provided by the governments of European competitors, opponents of this option would argue, U.S. producers would find themselves at a severe disadvantage in the global market.

A second argument for continuing NASA's expenditures on these programs is that limitations on noise levels and atmospheric pollutants impose an unfunded federal mandate on aircraft producers and airlines. Federal funds spent for research on noise and pollution abatement, as opposed to spending directed toward enhancing the economic viability of commercial aircraft, might be justified on the grounds that those funds cover a cost imposed on the industry by federal law. The force of that argument is diminished, however, to the extent that noise and atmospheric pollutants generated by jet air travel are unpaid "costs" that air travelers impose on the public at large. From that point of view, it is appropriate that aircraft producers, airlines, and, ultimately, air travelers pay the full social cost of their activities--including the cost of R&D that is directly applied to current and future jet aircraft.

DOM-33 ELIMINATE CERTAIN RURAL DEVELOPMENT PROGRAMS

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Eliminate Direct Loans and Loan Guarantees							
From the 1996 Funding Level							
Budget authority	195	195	195	195	195	195	1,170
Outlays	23	68	123	156	181	193	744
From the 1996 Funding Level Adjusted for Inflation							
Budget authority	201	207	213	218	224	231	1,294
Outlays	24	71	127	167	198	215	802
Eliminate Grants							
From the 1996 Funding Level							
Budget authority	464	464	464	464	464	464	2,784
Outlays	19	102	227	343	418	464	1,573
From the 1996 Funding Level Adjusted for Inflation							
Budget authority	478	492	506	520	534	549	3,079
Outlays	19	106	238	364	451	512	1,690

The Department of Agriculture assists rural communities through a variety of programs. With the enactment of the Department of Agriculture Reorganization Act of 1994, the Rural Development Administration (RDA) transferred its functions to the Rural Housing Service, the Rural Utilities Service, and the Rural Business Service. In general, the programs provide loans, loan guarantees, and grants for rural water and waste disposal projects, community facilities, rural development, and fire protection. Funds are generally allocated among the states based on rural population and the number of rural families with income below the poverty threshold. Within each state, funds are awarded competitively to eligible applicants, including state and local agencies, nonprofit entities, and (in the case of loan guarantees for business and industry) for-profit organizations.

The amount of interest that loan applicants pay varies with the type of aid they receive and, in some programs, with the economic condition of the area. For example, for rural water and waste disposal loans, interest rates can range from 4.5 percent to market rates, depending on the median family income in the service area. If repayment of a loan would impose an undue financial burden on the residents of relatively poor areas, those areas may receive grants instead.

For 1996, the Congress appropriated $195 million in budget authority to support the costs of nearly $1.4 billion in combined direct loans and loan guarantees. Under credit reform, those costs include the present value of interest subsidies and the cost of loans that go into default. In addition, the Congress appropriated $464 million for grants, of which $404 million was for water and waste disposal. Eliminating the loan programs would reduce federal outlays for subsidizing direct loans and loan guarantees by $744 million over the 1997-2002 period measured from the 1996 funding level. Measured from the 1996 level adjusted for inflation, savings would be

$802 million over the same period. Additional savings would be realized gradually as the costs of administering a shrinking portfolio decreased. Measured from the 1996 funding level, savings in outlays from eliminating grants would total about $1.6 billion from 1997 through 2002; adjusted for inflation, savings would be $1.7 billion.

One argument for terminating these programs is that federal funds should be directed toward activities whose benefits are national in scope, with state and local governments funding rural development. Moreover, studies by the General Accounting Office and the Center for Community Change found that two of the largest programs--the water and waste disposal program and the business and industry guaranteed loan program--were not well targeted toward low-income or distressed communities. Communities with higher incomes or lower unemployment (or both), the studies found, were more likely to receive assistance than communities with low incomes or higher unemployment.

Supporters of federal funding of rural development programs argue that, by sparking economic growth, the programs help to increase rural incomes. Eliminating those funding sources would probably reduce economic development activities because private credit simply might not be available in some areas. In addition, many fiscally distressed states and localities would be unable to offset the loss of federal grants and interest subsidies.

DOM-34 ELIMINATE THE ECONOMIC DEVELOPMENT ADMINISTRATION

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	340	349	349	349	349	349	2,085
Outlays	26	108	181	273	339	349	1,276
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	351	370	381	391	403	415	2,311
Outlays	28	112	191	292	368	389	1,380

The Economic Development Administration (EDA), an agency within the Commerce Department, provides grants to state and local governments for public works, technical assistance, defense conversion activities, and job programs, as well as loan guarantees to firms for business development. For 1996, appropriations for EDA programs total $349 million. Eliminating the EDA would reduce federal outlays by about $26 million in 1997 and $1.3 billion over the 1997-2002 period measured against the 1996 funding level. Measured against the 1996 level adjusted for inflation, savings would be $28 million in 1997 and $1.4 billion over the six-year period.

Critics of EDA programs have argued that federal assistance should not be provided for activities whose benefits are primarily local and that therefore should be the responsibility of state and local governments. In addition, EDA programs have been criticized for substituting federal credit for private credit and for facilitating the relocation of businesses from one distressed area to another through competition among communities for federal funds. Opponents have also cited the EDA's broad eligibility criteria, which together take in an area containing 80 percent of the U.S. population, and its record of providing aid with little proven effect compared with other programs having similar goals.

Because of the competitive nature of EDA grants, local governments do not incorporate that type of aid into their budget plans; hence, eliminating future EDA funding would not impose unexpected hardships on communities. Some of the reduction in aid associated with this option would, however, curtail economic development activities in financially distressed communities that have no other available resources. That cutback could result in the deterioration of infrastructure, the loss of prospective jobs, and decreases in local tax receipts in those areas.

DOM-35 ELIMINATE THE APPALACHIAN REGIONAL COMMISSION

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			From the 1996 Funding Level				
Budget Authority	169	170	170	170	170	170	1,019
Outlays	8	51	102	132	153	170	616
			From the 1996 Funding Level Adjusted for Inflation				
Budget Authority	174	180	185	190	196	201	1,126
Outlays	9	53	106	141	166	188	663

The federal government provides annual funding to the Appalachian Regional Commission (ARC) for activities that promote economic growth in the Appalachian counties of 13 states. For 1996, the Congress appropriated $170 million for the ARC. The states are responsible for filing development plans and for recommending specific projects for federal funding. The commission distributes the funds competitively, based on such factors as the area's growth potential, per capita income, and rate of unemployment; the financial resources of the state and locality; the prospective long-term effectiveness of the project; and the degree of private-sector involvement.

The ARC supports a variety of programs, including the Appalachian Development Highway System, to open up areas with development potential; the Community Development Program, primarily to create jobs; the Human Development Program, to improve rural education and health; and the Research and Local Development District Programs, to provide planning and technical assistance to multicounty organizations. Federal funds also support 50 percent of the salaries and expenses of the ARC staff. Discontinuing the programs funded through the ARC would reduce federal outlays by $8 million in 1997 and by $616 million over the 1997-2002 period measured from the 1996 funding level. Measured from the 1996 level adjusted for inflation, savings would be $9 million in 1997 and $663 million over the six-year period.

Those in favor of termination argue that the programs supported by the ARC duplicate activities funded by other federal agencies, such as the Department of Transportation's federal highways program and the Department of Housing and Urban Development's Community Development Block Grant program. Critics of the ARC also contend that although it allocates resources to poor rural communities, those areas are no worse off than many others outside the Appalachian region and therefore no more deserving of special federal attention.

Nevertheless, eliminating federal funding of the ARC programs would reduce economic development activities in the region, because the fiscal distress of many states and localities would probably preclude their offsetting that loss of resources. Thus, fewer jobs might be created, and rural infrastructure, education, and health care conditions might suffer in that area of the country.

DOM-36 ELIMINATE OR RESTRICT COMMUNITY DEVELOPMENT BLOCK GRANTS

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Eliminate the CDBG Program							
From the 1996 Funding Level							
Budget authority	4,600	4,600	4,600	4,600	4,600	4,600	27,600
Outlays	184	1,794	3,312	4,462	4,600	4,600	18,952
From the 1996 Funding Level Adjusted for Inflation							
Budget authority	4,738	4,876	5,014	5,152	5,295	5,446	30,521
Outlays	190	1,853	3,471	4,755	5,031	5,171	20,471
Restrict Eligibility and Reduce Funding							
From the 1996 Funding Level							
Budget authority	920	920	920	920	920	920	5,520
Outlays	37	359	662	892	920	920	3,790
From the 1996 Funding Level Adjusted for Inflation							
Budget authority	948	975	1,003	1,030	1,059	1,089	6,104
Outlays	38	371	694	951	1,006	1,034	4,094

The Community Development Block Grant (CDBG) program provides annual grants, by formula, to eligible metropolitan cities and urban counties through what is referred to as its entitlement component. Under the formula, jurisdictions with greater needs (as measured by factors such as population, poverty levels, and housing conditions) receive larger grants than those with lesser needs. The program also allocates funds, by formula, to each state. Those funds are distributed among nonentitlement areas, typically through a competitive process. Nonentitlement areas generally are units of local government that have populations under 50,000 and that are not metropolitan cities or parts of urban counties.

Community Development Block Grants in general must be used to aid low- and moderate-income households, to eliminate slums and blight, or to meet emergency needs. In accomplishing those goals, they may be used for a wide range of community development activities, including rehabilitation of housing, improvement of infrastructure, and economic development. Funds from the entitlement component may also be used to repay principal and interest on obligations that are issued by local governments to finance certain activities--such as the acquisition or rehabilitation of public property--and that are guaranteed by the federal government under the Section 108 loan guarantee program.

For 1996, the appropriation for the CDBG program amounts to $4.6 billion. Of that total, $3.1 billion is allocated to metropolitan cities and urban counties, and $1.3 billion goes to nonentitlement government units; the remainder is earmarked for specific purposes described in the appropriation act. Substantial federal savings could be realized either by terminating the CDBG program or by restricting eligibility for the entitlement component--to exclude the least needy jurisdictions--and reducing funding levels. Least needy jurisdictions could be defined by measuring relative economic well-being and fiscal

capacity using factors such as the number and percentage of families below the poverty level and per capita income.

Eliminate the CDBG Program. If the CDBG program was eliminated, savings in federal outlays would amount to around $184 million in 1997 and a total of $19 billion over the 1997-2002 period measured from the 1996 funding level. Measured from the 1996 level adjusted for inflation, savings would be $190 million in 1997 and $20 billion over the six-year period.

One argument for terminating the program is that federal funds should be targeted toward programs whose benefits are national rather than local. Accordingly, programs such as the CDBG program, which generate primarily local benefits, should be funded by state and local governments. Moreover, to the extent that local jurisdictions use CDBG funds to help them compete against each other to attract business, benefits are shifted away from local jurisdictions to private firms. Yet, without the CDBG program, a number of its activities would not be undertaken by most local governments--particularly the rehabilitation of low-income housing and, to some extent, economic development. Since the CDBG program is the largest source of federal aid for many cities, fewer resources would be available for low-income households. Furthermore, CDBG funding has presumably been figured into the budgets of entitlement recipients. Ending that support could impose at least temporary stress on many governments, some of which continue to experience fiscal difficulties.

Restrict Eligibility and Reduce Funding. If the entitlement component of the program was cut by 20 percent, federal outlays could be reduced by $37 million in 1997 and $3.8 billion over the 1997-2002 period measured from the 1996 funding level. Measured from the 1996 level adjusted for inflation, savings would be $38 million in 1997 and $4.1 billion over the six-year period. One way of achieving such a cut would be to eliminate funding for a sufficient number of the least needy jurisdictions. A cutback of that kind would effectively increase the proportion of funds going to the nonentitlement component from 30 percent to 35 percent, but the typically competitive nature of the distribution process would presumably ensure that those funds would be targeted toward the neediest areas. Carrying out this option would require both a change in the authorizing legislation and a cut in the program's annual appropriation.

An argument in favor of such a cutback is that no pressing interest is served by supporting jurisdictions that have above-average ability to fund projects themselves. For example, 15 of the 20 counties that had the highest per capita income in the nation in 1989 received funds in 1993 under the CDBG entitlement component. Eliminating funding for that type of jurisdiction, rather than reducing grants across the board, would ensure that the most distressed jurisdictions retained the same level of aid. However, a reduction in federal funds for affluent jurisdictions would probably curtail activities designed to aid low- and moderate-income households in any pockets of poverty in those areas, because local governments would probably not completely offset the reduction.

DOM-37 ELIMINATE FEDERAL SUPPORT FOR TENNESSEE VALLEY AUTHORITY ACTIVITIES

	Annual Savings (Millions of dollars)						Six-Year Cumulative
	1997	1998	1999	2000	2001	2002	Total
			From the 1996 Funding Level				
Budget Authority	82	109	109	109	109	109	627
Outlays	33	89	108	109	109	109	557
			From the 1996 Funding Level Adjusted for Inflation				
Budget Authority	86	117	121	125	130	134	713
Outlays	34	94	117	122	127	131	625

The Tennessee Valley Authority (TVA) is a federal agency that operates an electric utility with billions of dollars in annual sales. It is also charged with "planning for the proper use, conservation, and development of the natural resources of the Tennessee River drainage basin." The annual federal appropriation for the TVA supports its water and land management activities (including maintaining a system of dams and reservoirs), its environmental research center, and its efforts to assist local economic development.

In 1996, the TVA anticipates spending $144 million on those non-power-generating activities, financed by $109 million from federal appropriations, $18 million from purchasers of TVA electricity, and $17 million from user fees, timber sales, and other sources. Eliminating the activities that the annual appropriation supports, except those activities whose costs could be shifted to nonfederal sources, would reduce federal outlays by about $33 million in 1997 and $557 million over the 1997-2002 period measured from the 1996 funding level. Measured from the 1996 level adjusted for inflation, outlays would be reduced by $34 million in 1997 and $625 million over the six-year period.

In recent years, the TVA has used the largest chunk of its appropriation for water and land management. Eliminating federal support for those activities accounts for roughly 70 percent of the total savings in this option. The main argument for cutting that funding is that the activities should be financed regionally by state and local governments or by charging their beneficiaries fees--or discontinued if they are insufficiently valuable. Proponents of maintaining federal funding note that the TVA has a federally mandated mission to promote the proper use, conservation, and development of the region's natural resources as well as its economic well-being. They also argue that some benefits of the management activities, such as reductions in flood crests and improvements in ecological stability, are distributed very broadly or accrue in part to future generations. Funding the activities underlying those benefits through fees levied on the beneficiaries is therefore difficult.

Fifteen percent of the savings in this option come from eliminating funding for the TVA's Environmental Research Center in Muscle Shoals, Alabama. Past research at the center (formerly, the National Fertilizer and Environmental Research Center) developed 75 percent of the fertilizers in use today. The center's current program includes research in ozone mitigation, pollution-free agriculture, utility waste management, and biotechnology for cleaning up hazardous wastes.

Critics of the center argue that many of its research projects benefit the private sector and that other projects should be consolidated with research being conducted by the Department of Agriculture or the Environmental Protection Agency. Supporters of

continued funding note that the center has refocused its efforts (eliminating the projects in fertilizer research and development) and increased its use of external funding from other federal agencies and the private-sector Electric Power Research Institute. They also argue that the center is uniquely positioned to develop solutions that reflect a large region's environmental, economic, and social needs.

The remaining savings projected from this option result from withdrawing federal funding for the TVA's programs in local economic development. The broad argument against federal funding of those programs is that their benefits are largely regional. Funding should therefore be provided by state or local governments or through fees levied on private beneficiaries. Supporters of continued funding again point to the TVA's federally mandated mission and to the difficulty that state and local governments could have in apportioning the costs of collectively valuable programs in the absence of federal funding.

DOM-38 CONSOLIDATE AREA OFFICES OF THE BUREAU OF INDIAN AFFAIRS

	Annual Savings (Millions of dollars)						Six-Year Cumulative
	1997	1998	1999	2000	2001	2002	Total
From the 1996 Funding Level							
Budget Authority	10	16	16	16	16	16	90
Outlays	7	14	16	16	16	16	85
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	11	17	18	18	19	20	103
Outlays	8	15	18	18	19	20	98

The Bureau of Indian Affairs (BIA) currently has 11 area offices that serve the federally recognized tribes located within their geographic regions. Area offices employ 7 percent of the BIA workforce and coordinate child protection programs, financial trust services, and technical assistance. They also process loan and grant applications, negotiate and award self-determination contracts, and provide administrative support. This option would reduce the number of area offices from 11 to 6, saving $7 million in 1997 and $85 million from 1997 through 2002 measured from the 1996 funding level. Savings from the 1996 level adjusted for inflation would be $8 million in 1997 and $98 million from 1997 through 2002.

Reducing the number of area offices would accord with the desire of tribal organizations to decentralize decisionmaking authority. As the offices' role is redefined to comprise advising and assisting field offices and tribal organizations rather than implementing programs, fewer will be needed. Such a reduction would also be in line with the current trend toward self-determination among the tribes: many of them are opting, either by themselves or through outside contracting, to provide services that were once supplied by the BIA. Indeed, the BIA will face serious gaps in its ability to deliver services unless its area offices are consolidated.

However, savings from that consolidation will not go toward reducing the deficit if the current Secretary of the Interior fulfills the commitment he made to the BIA regarding their use. The Secretary has stated that the agency may use any savings from personnel cuts after 1995 to shift more of its funding directly to the tribes to train providers of technical assistance and services at the "front line." Such training is necessary to help tribes assume greater responsibility for those programs.

Another potential drawback to this option is that the cut from 11 to 6 area offices could diminish oversight at that level--at a time when it may be especially needed as tribal organizations move further into self-determination of their activities. The tribes, for their part, view the reduction with some concern: despite their desire for decentralized decisionmaking authority, they fear that consolidating area offices would be a first step toward losing their government-to-government relationship with the United States.

DOM-39 ELIMINATE THE NEIGHBORHOOD REINVESTMENT CORPORATION

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	34	39	39	39	39	39	229
Outlays	34	39	39	39	39	39	229
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	35	41	43	44	45	46	254
Outlays	35	41	43	44	45	46	254

The Neighborhood Reinvestment Corporation (NRC) is a public, nonprofit organization charged with revitalizing distressed neighborhoods. The NRC oversees a network of locally initiated and locally run groups called NeighborWorks® organizations, also known as NWOs, which engage in a variety of housing, neighborhood revitalization, and community-building activities. The corporation provides technical and financial assistance to begin new NWOs; it also monitors and assists existing members of the network. Currently, the NeighborWorks® Network has 177 NWOs as members. They operate in approximately 300 municipalities nationwide.

Eliminating the NRC would save $34 million in federal outlays in 1997 and a total of $229 million over the 1997-2002 period measured from the 1996 funding level. Measured from the 1996 level adjusted for inflation, savings would be $35 million in 1997 and $254 million over the six-year period.

For 1996, the NRC's annual appropriation of $39 million represents 94 percent of its annual income. With those funds, the corporation provides grants, conducts training programs and educational forums, and produces informative publications in support of member NWOs. The bulk of the grant money goes to NWOs. The organizations use the funds to cover operating costs; undertake projects; purchase, construct, and rehabilitate properties; and capitalize their revolving loan funds. A revolving loan fund relies on its initial stock of financial capital to make loans, which means that new loans are made only as outstanding loans are repaid (the sense in which the fund "revolves"). NWO revolving loan funds make home ownership and home improvement loans to individuals or loans to owners of mixed-use properties who provide long-term rental housing for low- and moderate-income households. Also, the NRC awards grants to Neighborhood Housing Services of America to provide a secondary market for the loans from NWO revolving funds. The corporation also uses its revenue to cover administrative costs and award contracts to suppliers of goods and professional services.

One argument for terminating the program is that federal funds should be targeted toward programs whose benefits are national rather than local. Member NWOs are funded partially at the local level, but because the NRC organizes, supervises, and provides grants to those local organizations, the program constitutes a case in which federal funds are being used to generate local benefits. In addition, the NRC does not dispense funds and assistance to all distressed communities. Instead, the benefits of the program accrue only to those neighborhoods that actively seek NRC funds.

Another argument for eliminating the NRC is that it appears to duplicate the efforts of other federal programs. For example, the Community Development Block Grant program also serves to rehabilitate low-income housing. Various other initiatives are carried out by government-sponsored enterprises

(GSEs) to promote home ownership and community development. Such GSE initiatives include the Federal Home Loan Bank System's Affordable Housing and Community Investment Programs and the Federal Home Loan Mortgage Corporation's Expanding Markets Program.

Proponents of the NRC argue that without it, the activities that it currently funds would not be undertaken, in part because state and local governments might not have the resources to make up the difference in federal aid. They also note that some of the NRC's activities are not duplicated in other home lending and housing rehabilitation programs--in particular, the nonhousing activities that the NWOs conduct in conjunction with home ownership and housing rehabilitation (such as community organization building, neighborhood cleanup and beautification, and leadership development). NRC supporters maintain that this focus on the condition of the neighborhood as a whole represents a comprehensive approach to the problems of affordable housing and community revitalization, and that the broad orientation has advantages that would not be associated with a more narrow focus.

To the extent that both the market and personal value of a home are inextricably tied to the condition of the neighborhood in which it is located, rebuilding the entire neighborhood enhances the value of each individual piece of property in that neighborhood. Rebuilding may enhance the collateral value of the properties, making the homeowners in the neighborhood eligible for loans from banks and other private sources at a later date. An emphasis on distressed neighborhoods and on the sources of distress may therefore have benefits that a program focused exclusively on low-income housing would not.

Finally, advocates say that the NRC fills a niche in the housing market. Supporting that contention is the fact that the home purchases it facilitates appear to be far below the median national price of a home. Additionally, the residents of the participating NWO neighborhoods are overwhelmingly low- to moderate-income people. Both of those factors suggest that the NRC operates in a market that has historically been underserved.

DOM-40 ELIMINATE THE MINORITY BUSINESS DEVELOPMENT AGENCY

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			From the 1996 Funding Level				
Budget Authority	24	32	32	32	32	32	184
Outlays	12	27	32	32	32	32	167
			From the 1996 Funding Level Adjusted for Inflation				
Budget Authority	25	34	35	36	37	38	205
Outlays	13	28	34	35	37	37	184

The Minority Business Development Agency (MBDA) of the Department of Commerce plays the lead coordinating role in all federal programs for minority business development. The Enterprise Development Program of the MBDA provides management and technical assistance to members of minority groups and minority-owned firms seeking to establish or expand their businesses. Services include business planning, marketing, financial planning, loan and business packaging to acquire capital, bid and proposal estimating and preparation, and management counseling on personnel, accounting, and inventory supplies. The activities of the MBDA's Resource Development Program focus on increasing minority access to capital, management, and market resources and on various other forms of indirect business assistance. The agency also has an Advocacy, Research, and Information Program, whose activities are well described by its title.

From 1995 to 1996, budget authority for the MBDA declined from $44 million to $32 million, and outlays declined from $42 million to a projected $35 million. Eliminating the MBDA would reduce outlays by $12 million in 1997 and by $167 million over six years measured from the 1996 funding level. Measured from the 1996 level adjusted for inflation, it would reduce outlays by $13 million in 1997 and by $184 million over six years.

The arguments for and against the MBDA mirror in part those of the larger debate over affirmative action. Proponents contend that minority groups, and especially African Americans, have historically been, and continue to be, hindered by pervasive discrimination. They argue that such discrimination leads to financial and educational disadvantage and lack of experience, which means that members of minority groups are less competitive relative to (non-Hispanic) whites in the business world. Discrimination also hinders minority businesses in their task of developing business relationships with suppliers and customers. Minorities, it is argued, need a helping hand to compensate for those unfair handicaps.

Opponents maintain that discrimination is substantially less than it once was and what remains is best fought by enforcing civil rights laws in the courts. Although, on average, African Americans and certain other minority groups are economically and educationally disadvantaged in comparison with whites, in many individual instances the reverse is true: individual African Americans or members of other minorities may be quite wealthy and educated and are competing with individual whites who are not. In such cases, opponents point out, a desire to help the disadvantaged would argue for helping the white person--not the minority group member. It is unfair, so the argument goes, to help current-generation minority individuals at the expense of current-generation whites simply because previous generations of whites benefited from discrimination against previous generations of minorities. Opponents contend that such help should be limited to

remedies for specific acts of illegal discrimination that have been proved in court or to general help for anyone who is disadvantaged, without regard to race. If the MBDA was eliminated, the Small Business Administration would continue to provide various kinds of assistance to small businesses in general, although its loans and loan guarantees would be ended under another deficit reduction option in this volume (see DOM-20).

DOM-41 ELIMINATE FUNDING FOR HEAD START

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			From the 1996 Funding Level				
Budget Authority	3,570	3,570	3,570	3,570	3,570	3,570	21,420
Outlays	1,430	3,210	3,570	3,570	3,570	3,570	18,920
			From the 1996 Funding Level Adjusted for Inflation				
Budget Authority	3,680	3,780	3,890	4,000	4,110	4,230	23,690
Outlays	1,470	3,350	3,820	3,920	4,030	4,150	20,740

Since 1965, Head Start has funded grants to local agencies to provide comprehensive services to economically disadvantaged children and their families. Its purpose is to foster the development of children from low-income families. The services supported by Head Start address the health, education, and nutrition of the children as well as their social behavior. Funds are awarded to about 1,400 grantees at the discretion of the Secretary of Health and Human Services, using state allocations determined by formula. Grantees must contribute 20 percent of program costs from nonfederal funds unless they obtain a waiver.

Head Start emphasizes involving families and the community to ensure that local programs are responsive to the needs of the areas they serve. As a result, wide variation exists in how Head Start services are delivered and in local program costs, sponsoring agencies, and coordination with other social service programs. Most Head Start programs provide center-based services to children for three or four hours a day during the school year. Although Head Start is authorized to serve children who are below the age of compulsory school attendance, most participants enter the program at age 4 and remain in it for one year before entering kindergarten. In 1994, about 750,000 children were served, approximately 60 percent of whom were 4 years of age. The average cost per child in Head Start in that year was $4,300 (compared with $5,900 per pupil spent by public elementary and secondary schools).

Eliminating Head Start would reduce federal outlays in the 1997-2002 period by almost $19 billion measured from the 1996 funding level. The savings from the 1996 funding level adjusted for inflation would be almost $21 billion over that period.

The primary argument for eliminating Head Start is that it does not improve the prospects of participants over the long run. Although the program produces gains in intellectual performance, social behavior, and emotional development by the end of a year of intervention, those gains decline and disappear as participants move through elementary school. Moreover, participation in Head Start does not inoculate children against serious academic problems and the need for remedial instruction in their early years of elementary school. Some early intervention efforts have provided evidence of long-term improvement in the lives of participants, but those projects were much more intensive--and expensive--than Head Start and were initiated several decades ago, when the social environment of the country, especially in urban areas, was different. Such results may not be possible in today's communities.

The main argument for funding Head Start is that it appears to reduce modestly the probability that participants will be placed in special education programs and to increase the likelihood that students will be promoted to higher grades. Proponents also argue that Head Start enrolls the most severely disadvan-

taged children and consequently could be credited with preventing participants from falling even further behind in their cognitive and socioemotional development before they enter elementary school.

An alternative option is to redirect some of the savings from eliminating Head Start to the Early Head Start Initiative approved in the 1994 reauthorization of Head Start. The initiative, whose funding is limited to 4 percent of total Head Start spending in 1997, offers comprehensive child development and family support services that are similar to those provided by regular Head Start projects--but the initiative offers them year-round to families with children under age 3 and pregnant women. Proponents of shifting funds to the initiative contend that it offers better value for the money. They argue that serving children who are younger, on average, than those in regular Head Start projects in conjunction with their parents could be more effective than the regular projects in producing lasting effects on patterns of child development and long-term behavior. However, critics of expanding the initiative are concerned about a possible dearth of qualified staff to meet the complex needs of younger children and their families. In that case, not only would the additional funds not be better spent, but the children might actually get fewer useful services than in the regular Head Start program.

DOM-42 ELIMINATE OR REDUCE FUNDING FOR TITLE I, EDUCATION FOR THE DISADVANTAGED

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Eliminate Funding							
From the 1996-1997 School Year Funding Level							
Budget authority	5,930	7,230	7,230	7,230	7,230	7,230	42,080
Outlays	710	5,780	7,080	7,230	7,230	7,230	35,260
From the 1996-1997 School Year Funding Level Adjusted for Inflation							
Budget authority	6,110	7,620	7,840	8,050	8,280	8,510	46,410
Outlays	730	5,980	7,490	7,850	8,070	8,290	38,410
Reduce Funding by 50 Percent							
From the 1996-1997 School Year Funding Level							
Budget authority	2,970	3,610	3,610	3,610	3,610	3,610	21,020
Outlays	360	2,890	3,540	3,610	3,610	3,610	17,620
From the 1996-1997 School Year Funding Level Adjusted for Inflation							
Budget authority	3,140	4,010	4,220	4,440	4,660	4,900	25,370
Outlays	380	3,090	3,950	4,240	4,450	4,680	20,790

NOTE: Funds provided by the Congress for the 1996-1997 school year include an advance appropriation for fiscal year 1997 that the Congressional Budget Office has incorporated in its baseline. The estimates of savings in this table assume that the program would be eliminated beginning in school year 1997-1998.

Title I of the Elementary and Secondary Education Act of 1965 provides grants to school districts to fund supplementary educational services for educationally disadvantaged children who live in areas with high concentrations of children from low-income families. Federal funds are allocated through a formula based on the number of poor children in an area. However, schools that receive Title I funds may use them to provide services to any students who are performing well below their grade level.

Students who receive services through Title I are most often pulled out of their regular classrooms for supplemental instruction. The extra education students receive can be in any subject but is most often in reading, mathematics, and language arts. The emphasis is largely on basic skills, although federal law encourages greater attention to developing so-called higher-order thinking skills.

Title I funds reach over half of all schools (more than 50,000) and in school year 1991-1992 served nearly 6 million children. Almost 70 percent of participants are in elementary school; an additional 10 percent are enrolled in kindergarten or preschool. Minorities make up about 60 percent of participants, with Hispanics the largest minority group.

Eliminating Title I funding would reduce federal outlays in the 1997-2002 period by about $35 billion measured from the 1996-1997 school year funding level. The savings from the 1996-1997 school year funding level adjusted for inflation would be more than $38 billion over that period.

The primary justification for eliminating Title I funding is that it does not improve the academic progress of students who receive its services. Comparisons with similar groups of students (by grade and poverty status) show that program participants do not improve their academic achievement relative to other students. Moreover, a recent study by the Department of Education found that the test scores of students receiving Title I services actually declined between the third and fourth grades, whereas those of nonrecipients rose slightly. (Many education researchers consider that time to be a critical transition period because by the fourth grade, students should have sufficiently mastered reading skills to enable them to learn by reading.)

According to its supporters, the main justification for continuing Title I funding is that it has become a major federal instrument for fostering school reform to improve learning for all children. States applying for Title I funds must show that they have, or will develop by 1998, standards for challenging academic content (for purposes of instruction) and for student performance (for assessing the outcomes of instruction), at least in the areas of mathematics and reading or language arts. Those standards, which specify what children are expected to know and be able to do, must apply to Title I participants as well as to all other pupils in the state.

An alternative approach would be to reduce funding for Title I to 50 percent of the 1996-1997 school year funding level. That option would save about $18 billion in the 1997-2002 period, or about $21 billion when adjusted for inflation. On the one hand, Title I could still be an effective instrument of school reform with only half of its current funding. On the other hand, it would probably continue to be ineffective in improving the academic skills of students who received its services.

DOM-43 ELIMINATE FUNDING FOR BILINGUAL EDUCATION

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			From the 1996 Funding Level				
Budget Authority	130	130	130	130	130	130	780
Outlays	20	100	130	130	130	130	640
			From the 1996 Funding Level Adjusted for Inflation				
Budget Authority	130	140	140	140	150	150	850
Outlays	20	110	130	140	140	150	690

Federal bilingual education programs authorized in title VII of the Elementary and Secondary Education Act of 1965 fund grants to school districts and other recipients to provide instruction to students who have limited proficiency in English primarily because a language other than English is spoken in their homes. Some federal support also goes to train teachers in techniques of bilingual education. Other grants provide funds to collect data and do research on such instruction.

Bilingual education projects funded through title VII provide a range of services to students with limited proficiency in English. In 1993, they aided about 350,000 pupils; in addition, title VII funds supported programs to train teachers and other educators that in 1991 could be found at 81 colleges and universities in 27 states. Most of the students served were taught by using a method of instruction called transitional bilingual education, which involves teaching children in each of their classes jointly in English and their native language. No more than 25 percent of federal funding for bilingual education programs may be used to support instruction only in English.

Eliminating federal bilingual education programs would reduce federal outlays in the 1997-2002 period by about $640 million measured from the 1996 funding level. Savings from the 1996 level adjusted for inflation would be about $690 million over the six-year period.

Proponents of this option contend that transitional bilingual education programs under title VII largely perpetuate and reinforce native cultures rather than advance literacy in the English language. The result, they maintain, is that the integration of students into American society is retarded.

Supporters of this federal program assert that transitional bilingual education, which introduces students to the English language while continuing instruction in their native language, helps students in two ways: they acquire knowledge in a variety of academic subjects as well as become literate in English. As a result, supporters argue, students will not fall behind their schoolmates in other subjects by the time they make the transition to classes taught only in English.

DOM-44 ELIMINATE FUNDING TO SCHOOL DISTRICTS FOR IMPACT AID

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	690	690	690	690	690	690	4,140
Outlays	570	680	690	690	690	690	4,010
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	710	730	760	780	800	820	4,600
Outlays	590	720	750	770	790	820	4,440

Impact Aid (previously known as School Assistance in Federally Affected Areas) is intended to compensate school districts affected by activities of the federal government. Payments are made to districts for federally connected pupils and for school construction in cases in which the federal government has acquired a significant portion of the district's real property tax base, thereby depriving the district of a source of revenue.

Impact Aid goes to school districts having a minimum of 3 percent (or at least 400) of their pupils associated with activities of the federal government, including pupils whose parents both live and work on federal property (Indian lands are part of that designation); pupils whose parents are in the uniformed services but live on private property; and pupils who live in low-rent housing that is federally subsidized. In addition, aid goes to a few districts enrolling at least 2,000 pupils (and 15 percent of enrollment) whose parents work on federal property. In 1995, Impact Aid went to approximately 2,500 school districts spread across all of the states. As a result of the program's reauthorization in 1994 (as title VIII of the Elementary and Secondary Education Act of 1965, as amended), Impact Aid is likely to be more targeted in the future toward pupils whose parents live and work on federal land. Because of hold-harmless provisions, however, most school districts will not be fully affected by the changes in the law until 1997.

Eliminating all funding for Impact Aid would reduce federal outlays in the 1997-2002 period by about $4.0 billion measured from the 1996 funding level and by about $4.4 billion measured from the 1996 level adjusted for inflation. Proponents of eliminating the program argue that the economic benefits from federal activities outweigh the demands placed on the schools, making Impact Aid unnecessary. Those economic benefits are considered so substantial that local jurisdictions compete vigorously for new federal activities and lobby intensely to forestall losing existing ones. Opponents counter that the presence of federal activities does not adequately compensate local governments and school districts for losses in property tax revenues. (Additional revenues resulting from federal activities are collected primarily by the state through income and sales taxes.) Moreover, some school districts--especially isolated ones that have military installations with large numbers of children residing on federal property--would face severe financial hardship if such funding was eliminated.

DOM-45 ELIMINATE FUNDING FOR THE SAFE AND DRUG-FREE SCHOOLS AND COMMUNITIES ACT

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	470	470	470	470	470	470	2,820
Outlays	60	370	460	470	470	470	2,300
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	480	490	510	520	540	550	3,090
Outlays	60	390	480	510	520	540	2,500

The Safe and Drug-Free Schools and Communities Act funds grants to states for programs to prevent drug abuse and violence. To be eligible for funds, states must assess their need for such aid and articulate measurable goals and objectives for reducing and preventing drug abuse and violence. Funds are allocated to states based on the number of children of school age and the share of federal Title I funds they receive. (Title I is the main federal program for educating disadvantaged children.)

The vast majority of those federal funds are allocated by states to school districts. Districts that receive funds must implement comprehensive programs to prevent drug abuse and violence among students and employees and must include activities to involve parents and community groups.

Eliminating funding for the Safe and Drug-Free Schools and Communities Act would reduce federal outlays by about $2.3 billion over the 1997-2002 period measured from the 1996 funding level. Savings from the 1996 level adjusted for inflation would be about $2.5 billion.

Critics of this program argue that it has not been successful in reducing drug and alcohol abuse among teenagers. The proportion of adolescents who say they use illicit drugs has risen from 20 percent to 31 percent in the past three years. Opponents also maintain that federal efforts to reduce drug use and violence should focus on law enforcement activities rather than on education and prevention efforts. Federal involvement in education and prevention programs in schools and communities, critics believe, undermines the accountability and responsibility of parents, teachers, and community leaders in combating drug abuse and violence.

Supporters of this program cite the increasing drug use among teenagers as evidence of the need for the program. Drug abuse and violence are so pervasive, they argue, that parents, teachers, and leaders in local communities lack both the time and the knowledge to be effective in opposing them. Proponents consider it necessary to employ expert guidance and additional training to help teachers, counselors, and others take action to deal with the problems associated with drug abuse and violence.

DOM-46 REDUCE FUNDING FOR ELEMENTARY AND SECONDARY EDUCATION PROGRAMS

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	6,500	7,140	7,140	7,140	7,140	7,140	42,200
Outlays	1,060	5,670	6,970	7,140	7,140	7,140	35,120
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	6,890	7,960	8,390	8,820	9,260	9,730	51,050
Outlays	1,130	6,070	7,790	8,400	8,830	9,270	41,490

NOTE: Funds for Title I for the 1996-1997 school year include an advance appropriation for fiscal year 1997 that the Congressional Budget Office has incorporated in its baseline. The estimates of savings in this table assume that Title I would be reduced beginning in school year 1997-1998.

About $325 billion will be spent educating children in elementary and secondary schools in this country in school year 1995-1996. The federal share of that total is expected to be almost 7 percent, or about $22 billion. The largest federal programs funded through the Department of Education are Title I of the Elementary and Secondary Education Act, which funds services for economically and educationally disadvantaged students; Impact Aid, which compensates school districts affected by certain federal activities; the Individuals with Disabilities Education Act, which funds services for disabled students; and the Perkins Vocational and Applied Technology Education Act, which funds vocational education.

Because the federal contribution to elementary and secondary education is relatively small, some analysts have suggested that funding for such programs in the Department of Education be decreased to help reduce federal spending (see, for example, DOM-42 through DOM-45 and DOM-47). Over the 1997-2002 period, holding funding for those programs at 50 percent of the 1996 level would save about $35 billion measured from the 1996 funding level and over $41 billion measured from the 1996 level adjusted for inflation. This option would reduce the appropriation by nearly 60 percent, in real terms, in the sixth year.

If the funding for these programs was reduced, the Congress might also consider modifying them to enhance the flexibility of state and local governments in adjusting to those decreases. One possible change would be to fold the programs into a block grant that specified purposes for which the funds could be spent but left decisions about how to use the funds to the states and the school districts. Since some of the programs are associated with federal mandates regarding services that children must receive (for example, for disabled students), the Congress might also want to modify those mandates.

The primary argument in favor of this proposal is that the federal government cannot afford to fund these programs at their current levels. If funding was reduced, state and local governments might offset some of the cuts to the extent that they found the programs useful or required by federal mandates. Enhancing the flexibility of states and school districts in adjusting to possible cuts could reduce some of the negative consequences of reductions in funding.

The main argument for maintaining funding for these programs is that the effects of cuts would be concentrated among the special populations of students that the programs serve. Those populations in-

clude students with one or more of the following characteristics: economically and educationally disadvantaged, limited proficiency in English, disabled, Indian (Native American) origin, and in vocational education. Because states and school districts are unlikely to be able to offset all of the reductions in federal funds, services for students in those categories would probably be reduced.

DOM-47 ELIMINATE 18 SMALL GRANT PROGRAMS IN THE DEPARTMENT OF EDUCATION

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	90	90	90	90	90	90	540
Outlays	10	70	90	90	90	90	440
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	90	100	100	100	100	110	600
Outlays	10	80	90	100	100	100	480

The Department of Education funds more than 200 programs that address a range of problems at all levels of education. Some analysts have argued that a number of those programs have either largely or completely achieved their original purposes or could be supported by other funding sources. The National Performance Review (NPR) recommended that 34 such programs be eliminated, and the Congress did eliminate a number of them. Among the remaining programs on the NPR list are seven relatively small programs that are not considered elsewhere in this volume. Another 11 programs in the Department of Education are each funded at $10 million or less in 1996. Those 18 programs range in cost from about $750,000 to $12 million a year. Eliminating all of them would save, over the 1997-2002 period, about $440 million measured from the 1996 funding level and about $480 million measured from the 1996 level adjusted for inflation.

NPR Terminations. The Congress appropriated $39 million in 1996 for the seven programs that the NPR recommended terminating. Eliminating those programs would reduce federal spending over the 1997-2002 period by $190 million measured from the 1996 funding level and by $210 million measured from the 1996 level adjusted for inflation.

Those seven grant programs vary in size and serve a wide range of purposes. The largest one--Education for Native Hawaiians--received $12 million in 1996. The smallest is the Ellender Fellowships (a grant to the Close Up Foundation to bring economically disadvantaged people to Washington, D.C., to increase their understanding of the federal government), which gets $1.5 million in funding. Other programs include several small ones for libraries and for civic education.

The NPR recommended terminating these programs because they duplicate others, have achieved their purposes, or are more appropriately supported with nonfederal funds. The Department of Education has already suggested eliminating most of them. Opponents of this option argue that many of the programs have been successful in addressing the specific problems for which they were created but are still needed because the underlying conditions continue to exist. Advocates also point out that alternative funding from local and state governments or private sources would probably not be forthcoming if the federal programs were eliminated.

Other Small Programs. The Congress appropriated about $52 million in 1996 for the 11 additional programs considered here that had annual spending of about $10 million or less. Eliminating those programs would reduce federal spending over the 1997-2002 period by $255 million measured from the 1996 funding level and by $280 million measured from the 1996 level adjusted for inflation.

Those 11 programs are all small and support a range of projects. The largest program, Inexpensive

Book Distribution, received $10 million in 1996. The next largest program, Urban Community Services, received $9 million. The other nine programs were all funded at $8 million or less.

Proponents of eliminating those programs argue that the projects supported by them are generally too small to be effective on a national scale, duplicate other efforts across the nation, or could be funded from other federal programs. Many of the programs might also obtain funding from foundations or other nonfederal sources. Opponents of elimination, however, argue that many of the programs are intended to demonstrate the effectiveness of imaginative ideas that could later be adopted by other schools, districts, or states. They also contend that the federal government has a natural role in disseminating information about useful innovations in education.

DOM-48 ELIMINATE STATE STUDENT INCENTIVE GRANTS

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	31	31	31	31	31	31	186
Outlays	6	31	31	31	31	31	161
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	32	33	34	35	36	37	206
Outlays	6	32	33	34	35	36	176

The State Student Incentive Grant (SSIG) program helps states provide financially needy postsecondary students with grant and work-study assistance while they attend academic institutions and schools that teach occupational skills. States must match federal funds at least dollar for dollar, while also meeting maintenance-of-effort criteria. Unless excluded by state law, all public and private nonprofit postsecondary institutions in a state are eligible to participate in the SSIG program. In 1996, the federal government provided $31 million, which was more than a 50 percent cut from previous funding levels.

During the 1997-2002 period, eliminating SSIGs would save taxpayers $161 million measured from the 1996 funding level and $176 million measured from the 1996 level adjusted for inflation. The extent of the actual reduction in student assistance would depend on the responses of states, some of which would probably make up part of the lost federal funds.

Proponents of eliminating this program argue that it is no longer needed to encourage states to provide more student aid. When the SSIG program was authorized in 1972, only 31 states had student grant programs; now, all 50 states provide student grants. Furthermore, state need-based aid for undergraduates increased from $1.1 billion (in 1995 dollars) in school year 1973-1974 to an estimated $2.9 billion in school year 1994-1995, when about 1.5 million students received such aid.

Opponents of eliminating SSIGs argue that not all states would increase their student aid appropriations to make up for the lost federal funding and some might even reduce them. Current funding levels could even encourage some states to drop out of the program. In that case, some students receiving less aid might not be able to enroll in college or might have to attend a less expensive school. Eight states just met the SSIG matching provision in school year 1991-1992.

DOM-49 ELIMINATE FEDERAL FUNDING FOR CAMPUS-BASED STUDENT AID

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	1,293	1,293	1,293	1,293	1,293	1,293	7,758
Outlays	129	1,254	1,293	1,293	1,293	1,293	6,555
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	1,332	1,371	1,409	1,448	1,488	1,531	8,579
Outlays	133	1,296	1,373	1,412	1,451	1,491	7,156

The federal government provides campus-based student aid through three programs: Supplemental Educational Opportunity Grants, Perkins Loans (formerly National Direct Student Loans), and Work-Study. Financial aid administrators at postsecondary institutions determine which eligible students receive aid under general federal guidelines. In 1996, the federal government provided $1.3 billion in campus-based aid, which will go to roughly 1.7 million students.

Eliminating federal funding for these programs would lower outlays from the 1996 funding level by $6.6 billion during the 1997-2002 period. The savings from the 1996 funding level adjusted for inflation would be $7.2 billion over that period. Alternatively, some of the savings from eliminating those programs could be redirected to the Federal Pell Grant Program, which is more closely targeted toward low-income students. The extent of the reduction in total student aid would depend on the responses of postsecondary institutions, some of which would make up part or all of the lost federal funds. Moreover, since postsecondary institutions retain about $6.3 billion in revolving funds under the Perkins Loan program, an estimated 592,000 students would receive loans, averaging about $1,340 in 1996, even if the federal government did not fund any new campus-based aid.

The primary justification for this option reflects the view that the main goal of federal student aid is to provide access to postsecondary education for people with low income. Because campus-based aid is tied to specific institutions, students with greater need at poorly funded schools may receive less than those with less need at well-funded institutions.

Postsecondary institutions object to this option, however, because it would reduce their discretion in packaging aid to address the special situations of some students while also reducing total available aid. Moreover, these programs disproportionately help students at private, nonprofit institutions (whose students get 40 percent of this aid, compared with about 20 percent of Pell Grant aid). Thus, cutting campus-based aid would make that type of school less accessible to needy students.

Redirecting some of the savings from eliminating campus-based aid to the Pell Grant program would mitigate the effects on lower-income students of less total aid. The Pell Grant appropriation provides for a maximum award of $2,470 in the 1996-1997 school year. Redirected funds from campus-based programs could be used by the appropriations committees to increase the maximum Pell grant. Pell grants allow students to choose freely among postsecondary institutions rather than be limited to institutions that offer them campus-based aid.

DOM-50 ELIMINATE FUNDING FOR THE NATIONAL AND COMMUNITY SERVICE ACT

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			Discretionary Spending				
From the 1996 Funding Level							
Budget authority	403	403	403	403	403	403	2,418
Outlays	43	250	359	396	407	415	1,870
From the 1996 Funding Level Adjusted for Inflation							
Budget authority	415	427	439	451	464	479	2,675
Outlays	44	259	378	428	450	471	2,030
			Direct Spending[a]				
Budget Authority	19	21	22	24	26	28	140
Outlays	0	0	0	0	0	0	0

a. Budget authority savings are from the interest that accrues in the National Service Trust Fund. No outlay savings are shown because the Congressional Budget Office includes the estimated outlays from the trust fund as discretionary spending.

As a reward for serving their communities, students may receive aid from the federal government to attend postsecondary schools through the National and Community Service Act. The act funds three programs: AmeriCorps, the National Civilian Community Corps (NCCC), and Serve-America. Those programs provide assistance for education, public safety, the environment, and health care, among other services. In many cases, the programs build on existing federal, state, and local programs. AmeriCorps and NCCC provide participants with an educational allowance that may reach as much as $4,725 for up to 1,700 hours of community service annually. Each person may participate for up to two years. Participants also receive a stipend for living expenses and, if they need them, health coverage and help with child care. Serve-America participants do not receive stipends or education awards but may receive academic credit toward their degrees. In 1996, federal funding for the three programs amounts to $403 million, of which $215 million is for AmeriCorps grants. About one-quarter of the total financial resources available for AmeriCorps come from state and local governments and from private enterprises. An estimated 25,000 participants will receive assistance.

Eliminating federal funding for these programs would save $1.9 billion over the 1997-2002 period measured from the 1996 funding level. The savings from the 1996 level adjusted for inflation would be $2.0 billion over that period. Alternatively, some of the savings from eliminating those programs could be redirected to the Federal Pell Grant Program, which is more closely targeted toward low-income students.

Some critics who favor eliminating the three programs maintain that the federal government's cost per participant is excessive. For example, the federal government pays more than $20,000 per AmeriCorps participant, of which only about one-third actually constitutes financial aid. Furthermore, critics argue that community service should be voluntary rather than an activity for which a person is paid. An additional justification for this option is based on the

view that the main goal of federal aid to students should be to provide access to postsecondary education for people with low income. Because participation in these programs is not based on family income or assets, funds do not necessarily go to the poorest students.

Supporters of the programs argue, however, that in addition to providing valuable services, the National and Community Service Act enables many students to attend postsecondary schools. Moreover, a substantial portion of AmeriCorps's total funding comes from state and local governments and from private enterprises, and at least some of those funds might not be available if the act was not there as leverage. Opponents of this option also argue that some early research on AmeriCorps indicates that the benefits to individuals and U.S. society are likely to be greater than the federal investment in it. In addition, they believe that offering opportunities for national service promotes a sense of idealism among young people and should be supported.

Redirecting some of the savings from eliminating these programs to Pell grants would mitigate the effects of this option on lower-income students. The Pell Grant appropriation provides for a maximum award of $2,470 per student in the 1996-1997 school year. The appropriations committees could use redirected funds from these national service programs to increase the maximum Pell grant.

DOM-51 ELIMINATE THE SENIOR COMMUNITY SERVICE EMPLOYMENT PROGRAM

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	375	375	375	375	375	375	2,250
Outlays	65	340	375	375	375	375	1,905
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	385	395	405	420	430	440	2,475
Outlays	70	355	395	410	420	430	2,080

The Senior Community Service Employment Program (SCSEP) funds part-time jobs for people age 55 and older who are unemployed and who meet income eligibility guidelines. Through SCSEP, which is authorized under title V of the Older Americans Act, grants are awarded to several nonprofit organizations, the U.S. Forest Service, and state agencies. The sponsoring organizations and agencies pay participants to work in part-time community service jobs for about 20 to 25 hours per week, up to a maximum of 1,300 hours per year.

SCSEP participants work in schools, hospitals, and senior citizen centers and on beautification and conservation projects. They are paid the higher of the federal or state minimum wage or the local prevailing rate of pay for similar employment. Participants also receive annual physical examinations, personal and job-related counseling, and assistance to move into private-sector jobs when they complete their projects. SCSEP is not considered a training program, but in recent years it has put increasing emphasis on preparing its participants for unsubsidized employment. About 20 percent of enrollees move on to such jobs.

Eliminating SCSEP would reduce outlays over the 1997-2002 period by about $1.9 billion measured from the 1996 funding level and by about $2.1 billion measured from the 1996 level adjusted for inflation. Opponents of the program maintain that it offers few benefits aside from income support and that the presumed value of the work experience gained by SCSEP participants would generally be greater if the experience was provided to equally disadvantaged young people, who have longer careers over which to benefit. In addition, the costs of producing the services now provided by SCSEP participants could be borne by the organizations that benefit from their work; under current law, those organizations bear only 10 percent of such costs. That shift would ensure that only those services that were most highly valued would be provided.

SCSEP, however, is the major federal jobs program aimed at low-income older workers, and eliminating it could cause hardship for older workers who were unable to find comparable unsubsidized jobs. In general, older workers are less likely than younger workers to be unemployed, but those who are take longer to find work. Moreover, without SCSEP, community services might be reduced if nonprofit organizations and states were unwilling or unable to increase expenditures to offset the loss of federal funds.

DOM-52 CONSOLIDATE SOCIAL SERVICE PROGRAMS AND REDUCE THEIR BUDGETS

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			Discretionary Spending				
From the 1996 Funding Level							
Budget authority	a	580	580	580	580	580	2,900
Outlays	a	410	490	580	580	580	2,640
From the 1996 Funding Level Adjusted for Inflation							
Budget authority	a	720	790	860	930	1,005	4,305
Outlays	a	505	675	835	905	980	3,900
			Direct Spending				
Budget Authority	a	885	905	920	935	950	4,595
Outlays	a	795	900	915	930	945	4,485

a. The option would not take effect until 1998.

Social services are provided to many individuals and families through an array of programs, each with its own rules and regulations. Those programs may be administered at either the federal or state level by separate agencies, even though they serve the same or a very similar clientele. In recent years, the number of separate programs has grown, particularly in child care, which has seen five new ones enacted since 1988.

This option would consolidate a number of social service programs into one or more block grants. A large array of programs could be consolidated. For the purposes of this illustrative estimate, the consolidation would bring together the Social Services Block Grant (SSBG), the Community Services Block Grant, Title IV-A "At-Risk" Child Care and Transitional Child Care programs, the Child Care and Development Block Grant, and grants to states for services and meals from the Administration on Aging. Two block grants--one for families with young children and one for the elderly--might be appropriate since the programs being considered in this option provide services primarily to those groups.

Consolidating these programs and holding spending in their new budgets at 25 percent below the 1996 funding level would reduce federal government outlays over the 1998-2002 period by $4.5 billion in direct spending and $2.6 billion in discretionary spending measured from the 1996 funding level. The savings from the 1996 level adjusted for inflation would be $3.9 billion in discretionary spending and $4.5 billion in direct spending over the same period. (The specific year-to-year savings would, however, depend on the particular features of the new block grant.) Three of the programs that would be consolidated--SSBG and the two Title IV-A child care programs--are entitlements that would affect direct spending. The remaining programs are discretionary and require annual appropriations. To allow time for designing and coordinating consolidation options, particularly the exact set of programs to include, implementation would be delayed until 1998.

With consolidation, localities could provide social services more efficiently. Duplicate services could be eliminated, and administrative costs would decline because of simpler rules and regulations that

would facilitate a reduction in administrative personnel. States and localities would have more freedom to tailor programs to local needs. Moreover, different services provided to the same individual or family could be coordinated more easily, improving service delivery from the client's perspective.

There would, however, be some risks. States would be unlikely to replace all or most of the lost federal funding, although individuals and families who were most in need could be protected, either by directing the consolidated grants toward states and areas with the lowest incomes or fiscal capacities or by federally mandating income limits for eligibility. In addition, because much of the affected spending is for child care subsidies, low-income mothers might find it more difficult to work outside the home, which could increase spending for welfare programs. Also, Transitional Child Care is an open-ended entitlement program, and converting it to a capped grant might reduce future funding. Finally, consolidation would diminish federal control over the specific uses of funds.

DOM-53 ELIMINATE OR REDUCE FUNDING FOR THE ARTS AND HUMANITIES

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			Eliminate Funding				
From the 1996 Funding Level							
Budget authority	950	940	940	940	940	940	5,650
Outlays	710	880	920	940	940	940	5,330
From the 1996 Funding Level Adjusted for Inflation							
Budget authority	970	980	1,020	1,050	1,080	1,110	6,210
Outlays	720	910	980	1,030	1,070	1,100	5,810
			Reduce Funding by 50 Percent				
From the 1996 Funding Level							
Budget authority	470	460	460	460	460	460	2,770
Outlays	350	430	450	460	460	460	2,610
From the 1996 Funding Level Adjusted for Inflation							
Budget authority	490	500	530	570	600	630	3,320
Outlays	360	460	510	550	590	620	3,090

NOTE: The savings shown in 1997 and 1998 would require a rescission of all or part of the advance appropriations for the Corporation for Public Broadcasting of $260 million in 1997 and $250 million in 1998. Funding for the corporation was $275 million in 1996. Reducing funding to half that level would save $123 million in budget authority compared with the 1997 funding level; eliminating the program would save $260 million.

The federal government subsidizes various arts and humanities activities. In 1995, federal outlays for the Corporation for Public Broadcasting, the Smithsonian Institution, the National Gallery of Art, the National Endowment for the Arts, the National Endowment for the Humanities, and the John F. Kennedy Center for the Performing Arts totaled about $1 billion.

Eliminating funding for those programs over the 1997-2002 period would reduce federal outlays by about $5.3 billion measured from the 1996 funding level and by about $5.8 billion measured from the 1996 level adjusted for inflation. Holding funding at half of the 1996 level would save $2.6 billion measured from the 1996 funding level and about $3.1 billion measured from the 1996 level adjusted for inflation during that period. That option would reduce appropriations by nearly 60 percent, in real terms, in the sixth year. The final effect of either option on arts and humanities activities would depend on the extent to which other funding sources--states, individuals, firms, and foundations--increased their contributions and on whether higher admission fees to those activities were used to make up for reduced federal funding.

Proponents of this option argue that federal funding for the arts and humanities is not affordable in a time of fiscal stringency, especially when programs addressing central federal concerns are not fully funded. Moreover, because many arts and humanities programs benefit predominantly higher-income people, instituting or raising admission fees or ticket

prices could substitute for federal aid in many cases. In a number of cities in the United States and abroad, for example, museums charge fees.

Reducing or eliminating federal appropriations for the arts and humanities would probably result in fewer of those activities, however, because other funding sources would not be likely to offset fully the loss in federal subsidies. As a result, activities that preserve and advance the nation's cultural heritage would be likely to decline.

DOM-54 REDUCE THE MATERNAL AND CHILD HEALTH CARE BLOCK GRANT AND THE PREVENTIVE HEALTH SERVICES BLOCK GRANT

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	413	413	413	413	413	413	2,478
Outlays	145	292	407	413	413	413	2,083
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	424	436	447	459	472	484	2,722
Outlays	149	304	430	448	460	473	2,264

In its appropriations for 1996, the Congress provided about $824 million in block grants for programs in maternal and child health and preventive health services. Almost all of those funds are distributed to the states, with a small amount being used for federal initiatives. The block grants, which are funded through the Public Health Service, allow states considerable flexibility in choosing the programs to fund within the specified areas. Those grants do not generally restrict benefits to categories of recipients, such as low-income families.

Each block grant supports a wide range of programs. The Maternal and Child Health Care Block Grant subsidizes programs that provide such services as preventive care, prenatal care, health assessments for children, rehabilitation services for blind and disabled children, and community-based services for children with special health care needs. The 1996 funding for that block grant was $679 million. The Preventive Health Services Block Grant supports programs in such areas as immunization, hypertension control, dental health, environmental health, and injury protection. Funding for 1996 was $145 million.

If funding for each of those block grants was held at half of the 1996 level, the savings in outlays for the 1997-2002 period would be about $2.1 billion measured from the 1996 funding level and about $2.3 billion measured from the 1996 level adjusted for inflation. In 2002, spending would equal 50 percent of the 1996 level adjusted for inflation.

The principal justification for these reductions is that the federal commitment to other programs directed toward maternal and child health and preventive health services has increased substantially in recent years. For example, Medicaid's coverage of low-income women and young children has expanded in several ways. States are now required to provide Medicaid coverage to pregnant women and to children under age 6 in families with income below 133 percent of the federal poverty level. States are also now required to provide Medicaid coverage to children under the age of 19 who were born after September 30, 1983, and whose family income is below the poverty line. The phase-in will continue until all children under the age of 19 with family income below the poverty line are covered by Medicaid in 2002. Thus, the block grants are not essential for ensuring access to health services for those individuals.

In addition, states have the option of providing Medicaid coverage for pregnant women and infants in families with income of up to 185 percent of the poverty line. As of April 1995, 35 states and the District of Columbia had set income thresholds above 133 percent of the poverty line for that population. Similarly, between 1992 and 1995, funding for programs of the Centers for Disease Control and Preven-

tion for immunization and prevention of human immunodeficiency virus (HIV) infection increased by $281 million.

The major disadvantage of cutting the block grants is that in the current fiscal environment, many states might be unable to assume a greater share of the financial responsibility for the affected programs. Cuts in the block grants could adversely affect the health of people--especially those in low-income families who are not eligible for Medicaid--who would receive less assistance from those programs.

DOM-55 ELIMINATE SUBSIDIES FOR HEALTH PROFESSIONS EDUCATION

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			From the 1996 Funding Level				
Budget Authority	256	256	256	256	256	256	1,536
Outlays	90	179	256	256	256	256	1,293
			From the 1996 Funding Level Adjusted for Inflation				
Budget Authority	263	270	277	284	292	300	1,686
Outlays	92	186	270	278	285	292	1,403

The Congress provided about $257 million to the Public Health Service in 1996 to subsidize education for physicians, nurses, and public health professionals. Those funds primarily furnish institutional support through grants and contracts to schools for designated training programs in the health professions. A limited amount of the assistance is provided through loans, loan guarantees, and scholarships for students. The programs promote training in primary care for physicians and other health professionals, advanced nursing education, and increased enrollment of minority and economically disadvantaged students:

o *Primary care training.* Several programs provide federal grants to medical schools, teaching hospitals, and other training centers to develop, expand, or improve graduate medical education in primary care specialties and other allied health fields and to encourage practice in rural and low-income urban areas. Funding for 1996 is $121 million.

o *Nursing education.* The subsidies to nursing schools are meant to increase graduate training for nurse administrators, educators, supervisors, researchers, and nursing specialists, including nurse-midwives and nurse-practitioners. Funding for 1996 is $56 million.

o *Support for minority and economically disadvantaged students.* Over half of these funds go to professional schools for recruiting, training, and counseling minority and economically disadvantaged students. The remaining funds are for student loans and scholarships. Funding for 1996 is $80 million.

Eliminating all of these subsidies would save, over the 1997-2002 period, about $1.3 billion measured from the 1996 funding level and about $1.4 billion measured from the 1996 level adjusted for inflation. The principal justification for this option is that market forces provide strong incentives for individuals to seek training and jobs in the health professions. Over the past several decades, physicians--the principal health profession targeted by the subsidies--have rapidly increased in number, from 142 physicians in all fields for every 100,000 people in 1950, to 161 in 1970 and 244 in 1990. Projections by the American Medical Association indicate that the total number of physicians per capita will continue to rise through 2000. In the case of nurses, if a shortage indeed existed, higher wages and better working conditions would attract more people to the profession and more trained nurses to nursing jobs, and would encourage more of them to seek advanced training.

Moreover, because the subsidies go mainly to institutions, they may have little effect on the numbers or characteristics of people studying to be health professionals. For example, most of the subsidies for nurses' training are directed toward increasing skills through baccalaureate degree programs and advanced

education in nursing, rather than raising the number of new entrants into the profession. Similarly, over half of the funds for increasing enrollment of minority and economically disadvantaged students are used to support schools' recruitment, training, and counseling efforts. Many critics of the subsidies contend that schools in the health professions have a strong commitment to recruiting students from diverse backgrounds. Given that commitment, schools would probably continue much of their recruiting and training efforts even if the subsidies were eliminated.

The major disadvantage of eliminating the subsidies is that the incentives supplied by market forces may not be sufficient to entirely meet the goals of these health professions programs. For example, third-party reimbursement schedules for primary care may not encourage enough physicians to enter those specialties and may not include financial inducements sufficient to increase access to care in rural and inner-city areas. In addition, fewer people might choose advanced training in nursing, which could limit the opportunities for the use of relatively inexpensive physician substitutes. Another drawback relates to the goal of increasing enrollment of minority and economically disadvantaged students. To the extent that schools did not fully offset the cut in federal funds for scholarships, fewer such students might enter the health professions, possibly exacerbating the problem of access to care in medically underserved areas.

DOM-56 REDUCE FUNDING FOR RESEARCH SUPPORTED BY THE NATIONAL INSTITUTES OF HEALTH

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			From the 1996 Funding Level				
Budget Authority	1,194	1,194	1,194	1,194	1,194	1,194	7,164
Outlays	531	1,095	1,187	1,190	1,194	1,194	6,391
			From the 1996 Funding Level Adjusted for Inflation				
Budget Authority	1,562	1,926	2,292	2,664	3,042	3,448	14,934
Outlays	695	1,594	2,050	2,420	2,798	3,188	12,745

The federal government provided $11.9 billion in 1996 for research funded through the National Institutes of Health (NIH). About 60 percent of the NIH research budget is awarded to universities and other nonprofit institutions through research grants and contracts. The rest is spent for research within the institutes, research contracts with industrial firms, research by state and local governments, foreign research, and administration.

A reduction in funding for NIH research could be justified by its rapid growth in recent years. Between 1985 and 1995, NIH expenditures more than doubled. If funds for NIH research were reduced to 90 percent of the 1996 funding level and held there, the 1997-2002 savings in outlays would be $6.4 billion. Measured against the 1996 funding level adjusted for inflation, the savings would be about $12.7 billion. NIH could respond to such reductions by limiting its overhead reimbursements for research grants and by funding research projects at a reduced proportion of their costs, thereby encouraging researchers to find additional sources of support. (See DOM-65 for a related option.)

In 1996, NIH allocated an estimated $6.6 billion --over half of its total funding--to competitively awarded research grants. Reducing NIH funding might mean that fewer research grants could be awarded. Because funding for those projects is based on a rating system, the least promising projects would be dropped first. In 1993, NIH funded 25 percent of the grant applications it received. Reducing the number of grants that NIH awards could cause some biomedical researchers to leave the field or seek employment in the private sector.

The federal government is the mainstay of support for basic biomedical research on which advances in medical technology depend, and many people argue that the government should spend more, not less, on such research. Although industry accounts for nearly half of all spending on health research and development, it may spend too little on basic research. Such research is aimed at discovering fundamental properties of nature--it can result in new knowledge that has applications for many treatments. But the results of basic research usually cannot be appropriated by a single firm; rather, they increase a knowledge base that many firms use in their search for cures for specific diseases. Because a firm cannot fully appropriate the benefits of that kind of research, it may spend less on it than is socially optimal. Hence, many people argue that government has an important role in funding basic biomedical research.

Advocates of such funding point to the benefits of past federal support of basic research, which has played a role in the recent explosion of knowledge about molecular biology and human genetics. Such knowledge could help in the search for new diagnostic tests and cures for serious health conditions that threaten the lives or well-being of millions of people --for example, birth defects, arthritis, diabetes, multi-

ple sclerosis, immune system diseases, heart disease, and cancer. The reduction in NIH expenditures set out in this option could slow progress in those important areas.

Proponents of a reduction in NIH spending for health research and development maintain that the effects of less government funding could be softened by increases in private-sector expenditures. To support their claim, they point to the recent increase in such funding: between 1983 and 1993, private-sector spending for health research and development more than doubled, even exceeding the increase in NIH spending.

DOM-57 LIMIT THE GOVERNMENT'S COST FOR THE FEHB PROGRAM BY ADOPTING AN EMPLOYEE VOUCHER PLAN

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			Discretionary Spending				
Budget Authority	a	100	300	500	700	900	2,500
Outlays	a	100	300	500	700	900	2,500
			Direct Spending				
Budget Authority	a	100	300	500	700	900	2,500
Outlays	a	100	300	500	700	900	2,500

NOTES: Estimates do not include any savings realized by the U.S. Postal Service.

In order to show the effect of the specific programmatic changes in this option, savings are calculated relative to spending that has been projected under the assumption that current laws and policies affecting this activity remain unchanged. That current-law spending projection differs from projections that are not based on any programmatic assumptions and simply assume that the 1996 level of funding for this activity (or that amount adjusted for inflation) is provided every year.

a. Less than $50 million.

The Federal Employees Health Benefits (FEHB) program provides health insurance coverage for over 4 million active federal employees and annuitants, as well as their 4.6 million dependents and survivors, at an annual cost to the government of about $11 billion. Two important differences separate the FEHB program from health insurance coverage provided by private employers. First, participants in the FEHB program choose from among many health insurance plans that offer varying levels of benefits and premiums; they can also switch plans annually. In contrast, many private-sector employees are offered no choice among plans, although larger firms tend to provide several alternatives. Second, in the FEHB program, the government and participants jointly finance the coverage through insurance premiums. In 1996, the government is expected to pay, on average, about 70 percent of the premiums for active employees and annuitants (including family coverage). Many large private employers pick up the entire cost of covering an individual employee and roughly 75 percent of the additional cost of family coverage.

Much more so than private-sector employees, federal employees have been able to switch from high-cost to lower-cost plans to blunt the effects of rising premiums. The dollar cap on premium contributions in the cost-sharing structure of the FEHB program (see the discussion below) encourages that efficient behavior and intensifies competitive pressures on all participating plans to hold down premiums. In the 1991-1995 period, premiums of FEHB plans increased by an average of 4 percent a year, whereas the premiums paid by medium-size and large firms surveyed by Hay/Huggins Company, a benefits consulting firm, increased by 7 percent a year. Furthermore, FEHB plan rates increased by just 0.4 percent in 1996.

Here is how the FEHB program's cost sharing works. For both employees and retirees, the government contributes 75 percent of the premium for the particular option selected by the enrollee, up to a cap on the contribution of $1,600 per year for individuals ($3,430 for families). Thus, the employee's share is at least 25 percent of any plan's premium. The dollar

cap is set at 60 percent of the average high-option premiums for individuals and families in the "Big Six" plans--five large plans and a phantom plan that acts as a placeholder for a former participating insurer. (Employer costs are higher under the U.S. Postal Service's collective bargaining agreement.) Employees have an incentive not to choose plans with premiums above $2,130 ($4,575 for family coverage) because they pay 100 percent of the added cost of the premium. Thus, the dollar cap helps to control program costs.

By contrast, the requirement that enrollees pay 25 percent of the premium in plans with costs below the $2,130 cap weakens employees' incentives for price-conscious selection among those health plans and also blunts price competition among plans to attract participants. Under the current arrangement, if an employee switched from a plan costing $2,100 to one costing only $1,800, his or her annual cost would be reduced by only $75.

This option simply makes a dollar cap universal by offering a flat voucher for health insurance premiums. Under that approach, the FEHB program would be revised so that it provided vouchers that paid the first $1,550 of the premium for employees and retirees ($3,400 for family coverage). Those amounts are based on the average government contributions in 1996 and would increase annually by the rate of inflation rather than by the rate of change in the Big Six premiums. The budgetary savings would come from indexing by inflation rather than by the growth of premiums--not from the voucher's enhanced incentives for reducing costs. Because premiums are expected to rise faster than inflation, the government's savings would be considerable. In addition, the government would have more control over its premium contributions because they would be more predictable; the program would no longer be an open-ended entitlement. Federal employees and retirees would also have the opportunity--by choosing low-cost plans--to reduce their share of the total premium below the 25 percent minimum under current law. However, those who chose plans with premiums well above the cap would pay more.

Compared with current law, savings in discretionary spending from reduced payments for current employees and their dependents would total $2.5 billion over six years. Yet despite those savings, government spending for FEHB premiums for current employees would still be growing each year. If the goal was to hold government payments constant over time, additional policy actions would be required. Savings in direct spending, relative to current-law spending, from reduced benefits for retirees would reach $2.5 billion over six years.

This option would strengthen price competition among health plans in the FEHB program because almost all current enrollees would be faced with paying all of the incremental cost of premiums above the new cap; now, only about one-third are in that position. (CBO's estimates of savings, however, reflect only the effects of indexing by inflation and not any additional benefit from enhanced competition.) The prospect of paying more would make purchasers more price-conscious, and many plans would have a greater incentive to economize and offer lower premiums to retain their participants. The option could, for example, accelerate the trend toward managed care, with its proven track record for cost containment. Moreover, if premiums were kept from rising faster than inflation, enrollees would receive the full benefit. A final advantage is that in the lowest-cost plans, enrollees could look forward to the government's paying the entire premium. (Almost all plans currently have premiums above $1,533 for individuals and $3,430 for family coverage, and there would be no incentive to offer a plan below those amounts.)

On the downside, this option would immediately raise premiums for some enrollees. Moreover, enrollees would pay an increasing share of their premiums--possibly 45 percent by 2002--when premium rates rose faster than the general rate of inflation that governs the proposed plan's growth. Currently, the government bears most of that risk; large private-sector employers bear essentially all of it. The added cost to enrollees could reach about $600 per worker in 2002 and more in later years. Asking employees and retirees to pay more would have a number of consequences. Although it could encourage participants to select more cost-efficient plans, it could also place more participants in plans with inferior benefits. Because the added costs to employees amount to a reduction in compensation, the government might find it harder to attract and retain high-quality employees. Finally, for current retirees and

long-time federal workers, cuts in promised benefits amount to a retroactive change in the terms of their employment that lowers their standard of living. (For further discussion of the pros and cons of such cuts, see ENT-27.)

This option has an additional drawback in that it would strengthen the existing incentives for FEHB plans to seek out healthy people and for healthy people to select cheap plans. Those patterns isolate sick people in selected plans that then experience increases in costs and risk financial instability. The Office of Personnel Management, which administers the FEHB program, can review plans to try to limit that form of adverse selection. However, its effectiveness in limiting all adverse selection is doubtful.

DOM-58 ELIMINATE LOW-INCOME HOME ENERGY ASSISTANCE

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	1,200	1,200	1,200	1,200	1,200	1,200	7,200
Outlays	840	1,050	1,050	1,050	1,050	1,050	6,090
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	1,227	1,263	1,299	1,335	1,372	1,412	7,908
Outlays	863	1,103	1,134	1,167	1,197	1,233	6,697

NOTE: The Congressional Budget Office's baseline includes $300 million a year during the 1997-2002 period that is contingent on the President's designation of an emergency, together with about $900 million a year in regular budget authority. The savings shown for 1997 would require a rescission of part or all of the $300 million advance appropriation for emergencies that is contained in the 1996 appropriation act.

The Low Income Home Energy Assistance Program (LIHEAP) helps pay the home energy costs of some low-income households. Authorized by the Omnibus Budget Reconciliation Act of 1981 and administered by the Department of Health and Human Services, LIHEAP funding for block grants to states is $900 million in 1996. States may use the grants to help eligible households pay their home heating or cooling bills, meet energy-related emergencies, or fund low-cost weatherization projects.

Households may be eligible if they receive assistance from certain other programs, such as Aid to Families with Dependent Children or Supplemental Security Income, or if their income is low. In addition, federal law requires that states give preference to households with the highest energy costs (relative to income) when disbursing LIHEAP funds. Only a minority of eligible households actually receive assistance.

Eliminating LIHEAP would save $6.1 billion in federal outlays during the 1997-2002 period measured from the 1996 funding level and $6.7 billion measured from the 1996 level adjusted for inflation. LIHEAP was created in response to the rapid increases in the price of energy used in the home in the late 1970s and early 1980s. Since 1981, however, inflation in fuel prices has lagged far behind general inflation: fuel prices are up about 25 percent since 1981 in comparison with an overall inflation rate of 70 percent. That fact might now warrant either eliminating or reducing LIHEAP.

The most recent LIHEAP appropriation of $900 million, however, is about 60 percent below the program's original 1981 level of funding in real terms. The additional appropriation of $300 million cannot be spent unless the President designates an emergency. Further reductions would create hardships for some low-income households, forcing them to choose between paying for energy or for other household necessities. A further argument for retaining LIHEAP at some level is the flexibility it provides to respond quickly to a future spurt in energy prices.

DOM-59 END THE EXPANSION OF PROGRAMS FOR BUILDING NEW HOUSING UNITS FOR ELDERLY AND DISABLED PEOPLE

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	1,010	1,010	1,010	1,010	1,010	1,010	6,060
Outlays	0	150	350	710	960	1,010	3,180
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	1,040	1,070	1,100	1,130	1,170	1,200	6,710
Outlays	0	160	370	750	1,030	1,110	3,420

Since the early 1980s, federal activities to provide rental subsidies for low-income people have shifted sharply from constructing low-income housing to using less costly existing housing subsidized with vouchers and certificates. Two construction programs under which new commitments are still being made are the Section 202 and Section 811 programs for elderly and disabled people, respectively. For 1996, more than $1 billion was appropriated to construct more than 14,000 new units and subsidize their operating costs.

Eliminating funding for additional new units under these programs would reduce outlays by $3.2 billion over the 1997-2002 period measured from the 1996 funding level. Measured from the 1996 level adjusted for inflation, outlays would be reduced by $3.4 billion. Initially, savings in outlays would be substantially smaller than savings in budget authority because of the long lags involved in building new projects and thus in spending authorized funds.

Proponents of this option contend that expanding programs to construct new housing for elderly and disabled people is inappropriate in light of the cutbacks in other areas of spending. Moreover, they see little need to subsidize any new construction. The overwhelming housing problem today, they argue, is not a shortage of rental units but the inability of low-income households to afford those that exist. For example, average annual vacancy rates nationwide have consistently exceeded 7 percent since 1986, the highest level since 1968. Also, turnover among households living in existing assisted projects would ensure that some new elderly or disabled households were assisted each year. If elderly and disabled people needed more housing assistance, it could be provided less expensively through vouchers or certificates.

Opponents of the option argue that national statistics on the supply of rental units mask local shortages of certain types of units. In particular, many households with an elderly or disabled person need housing that can provide special social and physical services that are not generally available in their current residence. People who support subsidized construction of units for low-income elderly and disabled households also maintain that the high costs of producing such units require the certainty of a guaranteed stream of income that only project-based subsidies can provide.

DOM-60 REDUCE FEDERAL RENT SUBSIDIES BY SHIFTING SOME COSTS TO TENANTS

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Establish a Minimum Rent for Assisted Tenants of $50 per Month							
Section 8							
From the 1996 funding level							
Budget authority	15	25	20	20	20	15	115
Outlays	45	70	50	40	35	30	270
From the 1996 funding level adjusted for inflation							
Budget authority	25	65	45	70	45	75	325
Outlays	45	85	80	80	75	75	440
Public Housing Operating Subsidies[a]							
Budget authority	40	35	35	35	35	30	210
Outlays	20	35	35	35	35	35	195
Gradually Increase Payments by Tenants from 30 Percent to 35 Percent of Income							
Section 8							
From the 1996 funding level							
Budget authority	40	100	130	180	210	220	880
Outlays	90	250	340	410	480	490	2,060
From the 1996 funding level adjusted for inflation							
Budget authority	80	290	320	680	600	950	2,920
Outlays	90	280	480	680	900	1,030	3,460
Public Housing Operating Subsidies[a]							
Budget authority	90	180	270	370	480	480	1,870
Outlays	40	130	220	320	420	480	1,610
Give Preference on Waiting Lists to Working Families							
Section 8							
From the 1996 funding level							
Budget authority	0	15	20	30	30	40	135
Outlays	5	35	45	55	60	70	270
From the 1996 funding level adjusted for inflation							
Budget authority	5	45	50	90	115	150	455
Outlays	5	40	65	95	125	155	485
Public Housing Operating Subsidies[a]							
Budget authority	5	30	30	60	60	90	275
Outlays	5	20	30	45	60	75	235

a. For public housing operating subsidies, savings from these options are essentially the same whether measured from the 1996 funding level or from the 1996 level adjusted for inflation.

Most lower-income renters who receive federal rental assistance are aided through various Section 8 programs or the public housing program, all of which are administered by the Department of Housing and Urban Development (HUD). Those programs usually pay the difference between 30 percent of a household's income after certain adjustments and either the actual cost of the dwelling or, under the Section 8 voucher program, a payment standard. In 1995, the average federal expenditure per assisted household for all of HUD's rental housing programs combined was roughly $5,100. That amount includes both housing subsidies and fees paid to administering agencies.

Increasing the amount that assisted tenants contribute toward their housing costs could yield savings in outlays by reducing federal payments on their behalf. One option is to require assisted tenants to pay at least $50 per month toward their rent. Alternatively, the percentage of their adjusted income that tenants contribute toward their rent could be raised from 30 percent to 35 percent. Yet another option for reducing federal outlays is to increase the proportion of assisted tenants who have relatively high income and thus require relatively low federal payments. That shift could be accomplished by giving preference on waiting lists to eligible working families. However, realizing the savings from these options would require changing the authorizing legislation of rental assistance programs and cutting their annual appropriations.

Establish a Minimum Rent for Assisted Tenants of $50 per Month. Under current program rules, more than 10 percent of renters who receive aid through the various housing assistance programs contribute less than $50 per month toward their rent. In the Section 8 programs, establishing a minimum rent of $50 per month would reduce outlays over the 1997-2002 period by $270 million measured from the 1996 funding level and by $440 million measured from the 1996 level adjusted for inflation. The option would also save $195 million in operating subsidies for public housing. (In the public housing program, this option and those discussed below produce the same savings whether measured from the 1996 funding level or from the 1996 level adjusted for inflation. The savings are similar because they depend on tenants' income and on the number of assisted households, both of which are assumed to be the same for the two funding levels.)

An advantage of this strategy is that it would require all assisted tenants to pay at least a minimum amount for their housing. A $50 minimum payment is not large in comparison with the average monthly rent of more than $450 estimated to be paid in 1997 by unsubsidized renters with very low income. A disadvantage of the option is that it would raise the housing costs of the poorest assisted households--those with adjusted income below $2,000 per year--who would probably find it difficult to increase what they paid for rent.

Gradually Increase Payments by Tenants from 30 Percent to 35 Percent of Income. If tenants' contributions were gradually raised (by 1 percentage point per year) from 30 percent to 35 percent of income, outlays in the Section 8 programs would drop by $2.1 billion measured from the 1996 funding level, and by $3.5 billion measured from the 1996 level adjusted for inflation, over the 1997-2002 period. Outlays for public housing operating subsidies would fall by $1.6 billion over the same period.

An advantage of this option, compared with establishing a $50 minimum rent, is that it would not single out the poorest subsidized tenants for rent increases but would treat all subsidized tenants similarly. In addition, if rent payments were increased to 35 percent of income, tenants' out-of-pocket costs would still be well below the nearly 50 percent of income typically paid by eligible renters who receive no assistance. Nevertheless, the poorest households receiving assistance might have trouble increasing their rent payment. The option could also cause some higher-income renters in assisted housing projects to move to unassisted housing because it might now cost less to rent. As those tenants were replaced by new ones with lower income, the concentration of families with very low income in those projects would increase. In turn, the savings of this option could decrease somewhat, and the quality of life in the projects could deteriorate.

Give Preference on Waiting Lists to Working Families. Current rules for rental assistance programs give priority to applicants on waiting lists who have the most severe housing problems, which are

defined in terms of the affordability and physical condition of their present housing units. Such families, on average, have substantially lower income than other income-eligible families without severe housing problems. If the programs required that at least 50 percent of assisted units that became available each year (excluding units designed for elderly and disabled people, which are typically not suitable for occupancy by families) be offered to families that included an employed adult, the proportion of units occupied by eligible families with higher income would gradually increase. Because such tenants would pay a larger amount in rent, federal subsidies in the Section 8 program would decline over the 1997-2002 period by an estimated $270 million measured from the 1996 funding level. They would drop by $485 million measured from the 1996 level adjusted for inflation. Outlays for public housing operating subsidies would be reduced by $235 million over the period.

Giving priority to families with an employed adult would increase the incentive to work among income-eligible renters who were not receiving assistance. In addition, working families would serve as role models in subsidized housing projects and possibly make such projects more desirable to live in. Nevertheless, this option would shift a substantial proportion of the aid that became available each year away from households with the lowest income and the most severe housing problems.

DOM-61 REDUCE THE NUMBER OF FAMILIES RECEIVING RENTAL ASSISTANCE

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			From the 1996 Funding Level				
Budget Authority	50	330	370	450	540	600	2,340
Outlays	170	430	490	520	560	610	2,780
			From the 1996 Funding Level Adjusted for Inflation				
Budget Authority	90	970	1,060	1,650	2,050	2,290	8,110
Outlays	170	530	890	1,260	1,630	2,000	6,480

Each year between 1975 and 1995, the Department of Housing and Urban Development (HUD) has increased the stock of Section 8 certificates and vouchers. Those forms of housing assistance allow recipients to live in housing of their own choosing, provided the units meet certain standards. Under the certificate program, HUD pays the difference between 30 percent of a recipient's income and a unit's actual rent (which today can range up to the 40th percentile of local rents). Under the voucher program, HUD pays the difference between 30 percent of a recipient's income and a payment standard. If the unit's actual rent exceeds the payment standard, the tenant pays the excess; if the unit's rent is less than the payment standard, the tenant may keep the difference. At the end of 1995, a total of about 1.4 million commitments for rental assistance were outstanding in both programs.

Outlays for the households assisted under these two programs are estimated to total around $8.3 billion in 1996. If the Congress extended the life of all commitments that are due to expire over the 1997-2002 period, the cost of those 1.4 million commitments would increase to around $10 billion by 2002, because the subsidy per household rises annually as a result of inflation. (The Omnibus Budget Reconciliation Act of 1990 directs the Congressional Budget Office to incorporate the cost of future renewals into its budget projections for housing aid when adjusting for inflation.) If, however, the Congress froze the budget authority for renewals of expiring contracts at the 1996 level, outlays for those programs would fall to $3 billion by 2002 because not enough funds would be available to renew all contracts. In addition, the number of assisted families would drop to about 417,000 by the end of 2002.

About 8 percent of vouchers and certificates are returned to public housing agencies each year by current recipients. Households turn in their vouchers, for example, when they move or when an increase in their income effectively reduces their subsidy to zero. Whether or not the Congress renewed all expiring contracts, the total number of outstanding certificates and vouchers, and thus outlays, could be reduced over time by reissuing only a portion of them. If half of the returned certificates and vouchers were not reissued, outlays would fall by $2.8 billion over the 1997-2002 period measured from the 1996 funding level and by $6.5 billion measured from the 1996 level adjusted for inflation.

An argument in support of this option is that no current recipients would lose their housing assistance as a result of it. Furthermore, some new income-eligible households would continue to be aided each year if half of the certificates and vouchers that were turned in were reissued.

An argument against the option is that it would hasten the current decline in the proportion of low-income renters who receive federal housing aid. Currently, about 30 percent of eligible renters receive assistance, and in spite of increases in the past in the number of certificates and vouchers, that share has started to decline because of growth in the number of eligible households.

DOM-62 REDUCE STAFFING AT VA MEDICAL FACILITIES BY 5 PERCENT

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
			From the 1996 Funding Level				
Budget Authority	506	506	506	506	506	506	3,036
Outlays	456	506	506	506	506	506	2,986
			From the 1996 Funding Level Adjusted for Inflation				
Budget Authority	525	543	562	582	603	624	3,439
Outlays	472	542	561	580	600	621	3,376

The Veterans Health Administration (VHA) of the Department of Veterans Affairs (VA) operates a nationwide medical care system that employed over 200,000 people in 1995 and comprises 173 hospitals, 131 nursing homes, and 391 outpatient clinics. Most of the hospitals are large and well staffed, providing access to high-quality medical care for eligible veterans. In the past, a large portion of that care was delivered on an inpatient basis. Today, although some hospitals are treating greater numbers of inpatients, most have seen a steady decline in demand for such services as major surgery and common acute care procedures.

This option assumes that the Congress will direct that the VHA's workforce be reduced by 5 percent in 1997. The VA would be free to distribute that reduction across medical specialties and facilities as it deemed best. A 5 percent reduction, if applied across the board, would save $456 million in 1997 and $3 billion over six years, measured from the 1996 funding level. Savings from the 1996 level adjusted for inflation would be $3.4 billion over the 1997-2002 period.

Several factors support a 5 percent reduction. Like other providers, the VA is moving toward more managed care, and its need for health care specialists, such as surgeons, is declining. Moreover, the shift in workload in the VA system toward more outpatient care means that more patients can be treated with fewer doctors and staff. Outpatient care is much less demanding of staff time. Besides improving efficiency, this option would also mean that surgeons and specialists would see more patients, thereby providing them with the "hands-on" experience needed to maintain high-quality care. (The drop in the amount of inpatient treatment has resulted in instances in which surgeons at some VA medical centers have performed few or no operations during some recent years.)

However, reducing staff by 5 percent could have disadvantages as well. To prevent shortages at some positions in some hospitals, the VA needs to exercise care in selecting the hospitals that must reduce their staff and the types of jobs to be eliminated. Workforce reductions need to be targeted toward those facilities that have experienced the greatest decrease in their workload. Otherwise, overburdened facilities could be forced to delay treatment for some patients.

DOM-63 REVISE THE MANDATORY SENTENCING SYSTEM FOR SOME NONVIOLENT FEDERAL CRIMES

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	0	0	4	9	16	23	52
Outlays	0	0	4	8	15	21	48
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	0	0	4	10	19	27	60
Outlays	0	0	4	9	17	25	55

For people convicted of certain crimes, federal law requires judges to impose mandatory minimum prison sentences. Defendants are not eligible to receive parole, probation, suspended sentences, or other alternative punishments. Deviations from that standard may occur only in cases in which prosecutors file a "substantial-assistance" motion on behalf of a defendant and the presiding judge grants a departure.

The enactment by the Congress of the Sentencing Reform Act of 1984 and other statutes covering drug and firearm violations has dramatically increased the number of crimes carrying mandatory minimum sentences and the number of prisoners under the jurisdiction of the federal prison system. Support for minimum sentences derives from several sources: public demands to "get tough" on crime, a drop in public confidence regarding the efforts of prisons to rehabilitate criminals, well-publicized horror stories of recidivist crimes, and the desire of lawmakers to eliminate sentencing disparities.

Many people who are convicted of crimes under statutes requiring mandatory sentences are nonviolent offenders--specifically, nonviolent drug offenders--with little or no criminal history, as classified by the Bureau of Prisons. For example, an analysis of federal prison statistics for 1991 determined that 87 percent of drug offense defendants with zero or one criminal history point (no more than one prior sentence of less than 60 days including probation or a fine) received prison sentences. Furthermore, the Department of Justice reported in February 1994 that more than 20 percent of federal prisoners in June 1993 were "low-level" drug offenders with no record of violence.

Mandatory incarceration of those offenders is costly and uses prison space that could be assigned to violent and more dangerous criminals. Nonviolent drug offenders could be punished for shorter durations or by more cost-effective means. Alternative punishments include fines or restitution, probation, community service, electronic home monitoring, shock incarceration ("boot camps"), or supervised release. However, the use of those alternatives is currently limited by the U.S. Code, the sentencing guidelines, and bureau regulations. Eliminating or reforming the mandatory minimum sentencing system for nonviolent offenders could reduce federal outlays by $48 million over six years measured against the 1996 funding level and by $55 million over six years measured against the 1996 level adjusted for inflation. More significant savings would accrue in the future as the prison population fully adjusted to the reforms. Ten years hence, annual savings would be between $40 million and $50 million at current prices.

Yet budgetary savings under this option are uncertain. They depend on whether freed-up space is filled with violent criminals who remain incarcerated for longer periods and on the effects of reform on the expansion of federal prison capacity.

For the purposes of these estimates, CBO assumed that the mandatory minimum sentences for nonviolent offenders would be reduced by approximately 50 percent, the annual cost of incarcerating an inmate would be about $20,000, and 500 to 700 prisoners would be eligible for the sentence reduction each year. The estimates also assume that appropriations would be reduced accordingly and no substitutions--of prisoners with reduced sentences for other types of offenders--would occur.

Proponents of reforming the mandatory minimum sentencing system argue that it has not achieved its primary goals. They contend that mandatory minimums, particularly in the case of nonviolent offenders, have moved prisons away from their primary mission--the removal of violent criminals from society--and, in fact, have led to reduced punishments for such criminals because of overcrowding. Furthermore, contrary to what was intended, mandatory minimums have not eliminated unwarranted disparities in sentencing; rather, they have created unwarranted sentencing uniformity by transferring discretionary authority from judges, who are limited in their sentencing options, to prosecutors, who determine which offenders may plea-bargain and potentially receive reduced sentences. In addition, because mandatory minimums increase the likelihood of long prison terms, many defendants believe they have nothing to lose and are more willing to risk going to trial. Consequently, significant backlogs have been created in the courts, and prisons have been populated beyond their intended capacity.

Perhaps most important, argue supporters of reform, are the differences in the fundamental nature of nonviolent drug crimes and violent crimes such as rape or murder. Most adult nonviolent drug crime is consensual; that is, it occurs between parties that engage in such conduct voluntarily. Moreover, since a large portion of drug crime is driven by the opportunity for huge profits, the mandatory incarceration of drug offenders overwhelms current prison capacity but does not change those financial incentives. Removing one drug offender from society just opens the door for others. Conversely, jailing pathological criminals such as child molesters or murderers has a tangible impact on the crime rate: it removes the cause of crime from the streets.

Proponents of reform also contend that alternative punishments or shorter sentences for nonviolent offenders could be equally effective and less costly than prison confinement. Fines and restitution in addition to probation, for example, may be appropriate penalties for some defendants and could allow offenders to compensate any victims of their transgressions. Such penalties may also allow nonviolent offenders to remain in the community as taxpayers and pay the fines or costs associated with their sentences more easily. Electronic home confinement might be another workable alternative to federal prison: it would restrict the movement and actions of some offenders while imposing significantly smaller costs than full-time prison confinement. Finally, shock incarceration, or boot camp, and its highly regimented prison term may be more constructive than traditional incarceration for some younger offenders.

Critics of this option maintain that mandatory minimum sentences are justified because they fulfill important law enforcement and sentencing goals. Just as legislators constrain judges with punishment ceilings that prevent disproportionate punishments, mandatory minimum sentences create a floor for punishment that cannot easily be breached. Moreover, mandatory minimums complement the "no parole" conditions of federal law, thereby promoting "truth in sentencing." Such well-defined terms, opponents contend, best serve two of the most important goals of sentencing: the incapacitation and deterrence of criminals. And because of the substantial-assistance provisions, which give prosecutors the leeway to offer defendants reduced sentences in exchange for cooperation with law enforcement officials, mandatory minimums make it more likely that other criminals will be captured. Furthermore, many supporters of such sentences would argue that all drug crime, even at the lowest level, is an inherently violent act because it supports drug traffickers and kingpins who often resort to violence.

Those who oppose alternative punishments or changes in the mandatory minimum system emphasize the benefits of "certainty in punishment" that accompany punishment floors. Guaranteed prison terms increase public safety by ensuring that no new criminal offenses will be committed by offenders for the duration of their sentence. Opponents of change

also contend that unwarranted severity in punishments is a minor problem and that in only a very few cases (around 5 percent) does the mandatory minimum sentence exceed the punishment that would have been allotted under the guidelines sentencing system. Finally, offenders who fail to conform to the terms of alternative punishments may actually be sentenced to longer prison terms than if they had been incarcerated initially.

DOM-64 REDUCE FUNDING FOR LAW ENFORCEMENT EFFORTS TO CONTROL ILLEGAL DRUGS

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
	From the 1996 Funding Level						
Budget Authority	1,659	1,659	1,659	1,659	1,659	1,659	9,953
Outlays	1,130	1,457	1,559	1,614	1,625	1,626	9,011
	From the 1996 Funding Level Adjusted for Inflation						
Budget Authority	1,709	1,760	1,814	1,867	1,922	1,980	11,052
Outlays	1,195	1,565	1,699	1,799	1,861	1,919	10,038

The federal government currently allocates almost $13.8 billion to the war on drugs. Of that amount, approximately $9.2 billion is directed toward controlling the supply and distribution of illegal drugs in this country. The remainder is allocated to research and development, treatment, education, and other efforts to control the demand for drugs. Interdiction and international activities account for about $1.7 billion of the funds designated for efforts to control the supply of drugs.

The results of this formidable effort have been mixed, and both supporters and detractors of current law enforcement activities can find encouragement in recent trends. Some indicators show that drug use is significantly less prevalent than it was before the inception of the war on drugs, whereas other measures show that there has been no decline among certain important subgroups, especially hard-core users. With no clear proof of the efficacy of law enforcement efforts against drugs, some critics argue that the federal government could drastically reduce the resources directed toward the problem without affecting drug use over the long term.

This option recommends the elimination of drug interdiction and international activities to control the supply of drugs. Those two efforts are the ones for which critics find the most questionable results. Through the early 1990s, the Congress scaled back funding for those activities somewhat, although their appropriations for 1996 have risen slightly over the 1995 funding level. Over six years, this option would save $9.0 billion measured from the 1996 funding level and $10.0 billion measured from the 1996 level adjusted for inflation.

This option would eliminate not only those drug supply activities conducted by nondefense agencies but those of the Department of Defense as well. Defense-related efforts account for roughly one-fourth of interdiction and international activities, and efforts related to the administration of justice account for over two-fifths. The remainder is split between the budget functions for transportation and international affairs. This option would leave unchanged the funding for treatment, education, and other activities focused on controlling the demand for drugs.

Proponents of reducing federal spending for interdiction and international activities argue that those efforts have not and cannot have a lasting effect on either the availability of or the demand for drugs. They have undoubtedly made it more difficult and more costly to grow, process, import, and distribute illegal drugs; but no hard evidence exists to support the hypothesis that intensified efforts have kept those drugs away from users or pushed prices up to levels that, in the long run, appreciably reduce the amount of drugs being purchased. In fact, some sources show that illicit drugs are less expensive and more readily available now than they were before the inception of the war on drugs.

In addition, current research shows that efforts to cut off the supply of drugs in their country of origin are not cost-effective, because producers' costs are only a small part of the users' charges. As drugs proceed farther along the processing and delivery chain, disruptions have a greater effect on retail prices and thus, one assumes, a greater deterrent effect. This evidence suggests that, to use law enforcement dollars to the greatest advantage, efforts should focus on the later stages of drug supply, particularly at the street level, where responsibility rests with state and local units of government. Of course, efforts to control the supply of drugs at that level are tenuous for several reasons: competition among producers and distributors, the large markup from wholesale to retail prices, and the ability of distributors to dilute the drug and so maintain an end price that customers can afford.

Proponents of cutbacks in law enforcement efforts also argue that factors related to demand, rather than supply, are dominant in determining drug use. In the past 10 years, most measures of substance abuse have shown significant declines, including lower levels of serious drug use and reductions in the number of people needing treatment. Although causality cannot be assigned, one could argue that the declines are independent of the level of federal resources allocated to controlling drug use. Proponents of reducing enforcement efforts claim that perceptions of health risks and societal attitudes, not enforcement, have probably reduced the demand for drugs among casual users. They also argue that stepped-up levels of enforcement could not have controlled past increases in the number of people with serious drug problems because hard-core users tend to become immune to such efforts. Instead of more enforcement, proponents argue for an expansion or reshaping of existing drug education and treatment programs and for more attention to societal problems, such as dysfunctional families, that contribute to overall drug use.

Those opposed to cutting funds for drug enforcement and related efforts point to the successful side of these activities: the destruction of major drug trafficking organizations and the large quantities of illegal crops and drugs that have been destroyed or seized. Law enforcement planners believe that they can take some credit for the reductions seen in drug use since its apex in the mid-1980s; they argue that street prices would have been much lower, and the availability of drugs much greater, without extensive funding for criminal justice efforts. Given that overall drug use remains at unacceptably high levels and that several indicators show recent increases in some categories of use, they contend that it would be premature and irresponsible to reduce or shift current resources away from enforcement. They point out, moreover, that criminal justice efforts are needed as much to keep some control over illegal drug activity as to reduce it, and that many programs are hard-pressed to maintain their existing levels of effort even with current funding. For some agencies, cutting back their funding for interdiction and international efforts would also disrupt some of their activities that are not related to combating the use of drugs.

DOM-65 REDUCE THE OVERHEAD RATE ON FEDERALLY SPONSORED UNIVERSITY RESEARCH

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
From the 1996 Funding Level							
Budget Authority	384	384	384	384	384	384	2,304
Outlays	171	352	382	383	384	384	2,056
From the 1996 Funding Level Adjusted for Inflation							
Budget Authority	499	615	730	845	964	1,091	4,744
Outlays	222	509	653	769	888	1,010	4,051

Federal spending for research and development (R&D) performed at universities covers both direct and overhead costs (also known as indirect costs). The major direct costs of research are wages for scientists, engineers, and technicians and payments for materials and specialized equipment. Overhead costs allocated to federal research include research-related administrative overhead, library and student services, buildings and equipment used in common, and operations and maintenance. The National Institutes of Health (NIH) accounts for roughly half of federally sponsored university research. The National Science Foundation and the Department of Defense are also major sources of federal funds.

To calculate the overhead expenses that can be allocated to federal research, universities typically take most, but not all, of their direct costs (known as modified direct costs) and apply a prenegotiated payment rate to them in each of several categories. The sum of the rates from all of those categories is the overall payment rate for overhead expenses. Overall overhead payment rates could be set and frozen for all universities at 90 percent of their 1996 level. Doing so would save $171 million in 1997 and $2.1 billion over the 1997-2002 period relative to the 1996 funding level. Relative to the 1996 level adjusted for inflation, the option would save $222 million in 1997 and $4.1 billion over the 1997-2002 period. (The two sets of savings estimates differ because the inflation-adjusted level of funding for university R&D grants would have to be reduced to maintain the program at the 1996 funding level. Both sets of cuts would reduce the grant programs to the same level of funding in 2002.) To capture the savings from this option, the Congress would have to reduce the appropriations for university research by an amount corresponding to the mandated reduction in overhead costs.

The overhead payments for federally sponsored university research have increased faster than the direct costs of research, although that growth has moderated in recent years. In 1972, each dollar of direct research funding paid to universities carried an additional 30 cents to cover the overhead costs allocated to federal research. Over the next decade, the share of overhead costs rose rapidly, finally leveling off at around 45 percent beginning in 1985. In 1994, the government paid 44 cents in indirect costs for each dollar spent on direct research. (Because payment rates are applied only to a portion of the total direct costs and because some agencies pay lower overhead rates for certain grants, the overall payment rate is higher than the ratio of overhead costs to direct costs.)

Overhead payments related to facilities have led the increase in costs, contrary to the impression given by well-publicized instances of questionable charges by universities to overhead payment accounts. Those charges have not been a major factor in the long-term growth of the share of overhead; in fact, auditors estimate that they account for only about 1 percent of

those costs. Increases in the costs of operating and maintaining facilities--utilities, repairs, and janitorial services--have been the major component of the escalation in facilities costs in the past decade. And growth has continued even in the face of substantial drops in the price of energy. Higher costs for new buildings as a result of higher real estate prices, construction inflation, and interest costs have not been as significant.

Given the leveling off of overhead rates since the late 1980s, many analysts have questioned the need for continuing to focus on them. But that leveling has only been possible because of pressure on the administrative portion of overhead expenses. Overhead rates for facilities costs have continued to rise throughout the 1990s. The Administration has promulgated regulations that would require universities to provide more detailed information to justify their requests for reimbursement. It is also developing benchmarks for facilities costs to provide appropriate incentives for universities to hold down unnecessary expenses.

The rise in the share of funding for federally sponsored university research that goes to pay for overhead has fostered a concern that each federal dollar spent is now producing less actual research activity. Freezing the payment for overhead costs at 90 percent of its current level is meant to allay that concern. Under that policy, no single university would experience a very large reduction. But the reduction would hurt small and state universities that have kept their overhead costs low.

Some people might argue that competition by universities for grants should be sufficient to control the growth of overhead, and that the increases in the share of those costs are an unavoidable outcome of market forces and reflect real cost increases. The market for university research, however, tends to be concentrated among a relatively small number of universities overall and to be very concentrated in specific research areas. Because only a few institutions contend for a large share of federal spending for university R&D, it may not be reasonable to assume that competition is enough to hold down overhead costs. The higher overhead rates charged by the largest private universities that are major recipients of federal support may indicate a lack of competition. (There is also some evidence that those schools may charge much lower overhead rates on private grants.) If competition is indeed lacking, regulatory rules are an appropriate response to ensure that federal dollars are spent in the most productive way. Capping overhead payment rates would supply the discipline that the market has been unable to provide and motivate some institutions to become more efficient and cost-conscious.

Defenders of the current system contend that the increases in the overhead costs of university research are legitimate and that the nation's system of research universities will be hurt if universities are not permitted to recover the total cost of the research they conduct. Financially strapped institutions could be forced to reduce investments in new facilities, library collections, and the like. In fact, the success seen since 1985 in slowing the growth of overhead costs can be attributed in part to reduced spending for libraries. If inadequate library resources reduce the effectiveness of universities in performing their research and education missions in the future, the near-term savings gained by controlling overhead costs may not be worth the loss of future benefits to society as a whole.

University advocates make other points as well. The higher overhead rates of large private universities may not be due to a lack of cost discipline; instead, because those institutions lack state government appropriations, they may simply be more assiduous in claiming all that is rightfully theirs. Another argument made against a reduction is that, because the data are lacking to determine the actual total costs of R&D, such a reduction could be set below the real cost-recovery point. Nevertheless, many in the research community would advocate reductions in the amount of overhead payments. However, they would apply the savings to increasing the number of research grants rather than reducing the deficit.

DOM-66 REDUCE THE NUMBER OF POLITICAL APPOINTEES

	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	17	64	101	103	37	73	395
Outlays	16	62	100	103	40	71	392

NOTES: Savings exclude reductions in agency contributions to federal employee retirement trust funds because those reductions do not affect the deficit.

In order to show the effect of the specific programmatic changes in this option, savings are calculated relative to spending that has been projected under the assumption that current laws and policies affecting this activity remain unchanged. That current-law spending projection differs from projections that are not based on any programmatic assumptions and simply assume that the 1996 level of funding for this activity (or that amount adjusted for inflation) is provided every year.

Generally, the term "political appointee" refers to employees of the federal government who are appointed by the President, some with and some without confirmation by the Senate, and to certain policy advisors hired at lower levels. For the purposes of this option, the term covers Cabinet secretaries, agency heads, and other "executive-schedule" employees at the very top ranks of government; top managers and supervisors who are noncareer members of the Senior Executive Service; and confidential aides and policy advisors who are referred to as Schedule C employees. Total employment in such positions, according to CBO projections, will average about 2,700 over the next six years. If the government instead capped the number of political appointees at 2,000, savings over the 1997-2002 period would total $392 million. The average salary for political appointees in the CBO calculations is estimated to be $77,000.

The National Performance Review (NPR) called for reductions in the number of federal managers and supervisors but made no specific reference to those managers and supervisors who were political appointees. Yet the argument that the NPR put forth for reducing the number of government managers--that they add to organizational layering and complexity and therefore stifle initiative and limit flexibility--also applies to top managers who are political appointees. In the same vein, the National Commission on the Public Service, also known as the Volcker Commission, called for a limit on the number of political appointees similar to the one described here.

In addition to the problem of excess organizational layering, the commission described concerns associated with the lack of expertise in government operations and programs that characterizes many appointees. In political appointments, the commission noted, more weight is generally given to political loyalties than to knowledge of government. Moreover, few appointees are in office long enough to acquire the necessary skills and experience to master their job. That lack of experience, wrote the commission, means that political appointees in many instances are not effective in carrying out the policies of the President they serve and can disrupt the day-to-day operations of agencies. Another consequence is that career managers become frustrated and demoralized, making recruitment and retention difficult in the top ranks of the career civil service.

Those observers who defend the use and proliferation of political appointees cite the importance for a President of establishing control over the vast bureaucracy by having like-minded individuals and allies strategically located throughout the government. Those appointees, supporters note, form an important link to the electorate because they help to ensure leadership throughout government that is consistent with the philosophy of each elected President. Such appointees, moreover, can be a source of fresh perspectives and innovation. The high rate of turnover among many appointees, supporters argue, means that those officials make way for someone new before they reach the point of "burnout."

DOM-67 ELIMINATE THE ONE-DOLLAR BILL AND REPLACE IT WITH A NEW DOLLAR COIN

	Annual Added Revenues (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Revenues	0	0	0	80	110	115	305

NOTE: In order to show the effect of the specific programmatic changes in this option, savings are calculated relative to spending that has been projected under the assumption that current laws and policies affecting this activity remain unchanged. That current-law spending projection differs from projections that are not based on any programmatic assumptions and simply assume that the 1996 level of funding for this activity (or that amount adjusted for inflation) is provided every year. In addition, the above estimate does not account for any effect on direct spending from costs incurred by the U.S. Mint. Initially, costs at the Mint would increase, but those costs would be recouped when the new coins were deposited at the Federal Reserve. Thus, over time, the net effect on direct spending would be zero.

The United States is one of the few industrialized countries that continues to use paper bills for sums as small as the equivalent of one dollar. Each year, the Bureau of Engraving and Printing (BEP) within the Department of the Treasury manufactures billions of currency notes of all denominations, which are purchased by the Federal Reserve at cost. Depending on demand, dollar bills constitute approximately 40 percent to 50 percent of all notes produced annually. So many one-dollar notes must be printed and purchased because they lack durability: they circulate, on average, only 18 months before they must be retired. By contrast, coins are substantially less costly to circulate because they have lower handling expenses and may remain in circulation for up to 30 years.

Eliminating the one-dollar bill and replacing it with a new one-dollar coin would lower the costs to the government of producing and maintaining the nation's supply of currency. As a result, the option would lower the charges to the Federal Reserve System and increase its earnings, which are remitted to the Treasury and counted in the federal budget as miscellaneous receipts. Implementing this proposal would increase revenues by $305 million over the next six years. (Although savings here represent an increase in revenues, this option is not included in the chapter on revenues because it does not involve changes to tax policy.) That estimate covers only reductions in purchasing and processing costs for the Federal Reserve System. Those costs would decline because the Federal Reserve could forgo annual purchases of billions of one-dollar notes (although the decline would be offset in part by the cost of increased purchases of two-dollar notes) and because coins would not require the careful and more costly inspections for counterfeiting and fitness for circulation that notes currently receive.

Given the U.S. Mint's limited capacity to produce coins, the estimate also assumes 30 months of lead time for the Mint to produce and stockpile new dollar coins before their formal introduction into circulation. Based on the experiences of other countries, the period of converting notes to coins should be as short as possible to promote a smooth transition. Thus, in an economy as large as that of the United States, large stocks of coins should be minted before the changeover and adequate time should be allotted for planning the conversion, or shortages of one-dollar currency could result. Shortages could raise public resistance to the changeover and prompt lawmakers to allow dollar notes to remain in circulation. Those developments could lead to the failure of a new dollar coin similar to that of the Susan B. Anthony dollar, but on a far larger scale.

Once the changeover to coins was complete, the government's savings would be even larger--on the order of $150 million per year. Because coins are so durable, the long-run annual cost of a coin in circulation is about 2 cents to 3 cents lower than the corresponding cost of a note. Replacing the approximately $6 billion in one-dollar notes now in circulation could realize those savings.

Moreover, the long-run savings from converting to coins could be much greater than the direct savings to the government through 2002 if the public was willing to hold more than a single dollar coin for each one-dollar note that was formerly in circulation. As the experience of other countries suggests, the public may hold a larger amount of non-interest-bearing coin and currency after the conversion is complete. For example, the Federal Reserve and the General Accounting Office estimate that the public would hold $9 billion in one-dollar coins and $1.5 billion in additional notes compared with the $6 billion in one-dollar bills that is currently held. That shift would permit the government to finance $4.5 billion of federal debt by issuing non-interest-bearing coins and currency instead of interest-bearing Treasury securities. With interest rates at 6 percent, the government would save $270 million in interest per year. With reduced interest costs in the first year, borrowing from the public would be lower in all subsequent years, resulting in even more savings.

In addition to savings in costs, proponents of this option argue, a new dollar coin would have other benefits. Dollar coins would be easier for the visually impaired to distinguish and easier to use in most vending machines. They would also increase the speed of many low-level business transactions.

However, new costs would be associated with a dollar coin. The U.S. Mint would be required to expend resources to cover the costs of research and development, metals acquisition, storage for coins stockpiled before their introduction into circulation, and a public awareness campaign. The Mint would pay for those costs by spending a portion of the profit (or seigniorage, the difference between the face value of coins and their cost of production) that the federal government earns on the manufacture of coins under current law and their subsequent deposit at the Federal Reserve. That subsidy would be recouped when new dollar coins were similarly deposited. Nevertheless, dollar coin start-up costs would increase government spending in years prior to the introduction of the new coins into circulation. Over time, however, the net cost to the Mint would be zero.

Based on the government's unsuccessful efforts with the Susan B. Anthony dollar, critics of a new dollar coin argue that the United States would need to take strong measures to ensure the coin's acceptance. According to that view, the government would have to be prepared to eliminate the dollar note completely, ensure that the new coin's form was distinct from those of other coins, and promote it vigorously. Even so, critics contend there is no guarantee that a new dollar coin would gain public acceptance. Coins are bulky, and commercial banks, which shoulder the majority of coin processing costs, would see their expenses rise. Finally, critics assert that the focus on budgetary savings should not come at the expense of other significant factors, such as the importance of a convenient currency, an efficient payments system, and a coin that meets the needs of citizens.

Nonetheless, most major European countries have overcome those obstacles. Valued at recent exchange rates, the smallest paper note denominations in Spain (500 peseta/$3.90), France (50 franc/ $9.75), Germany (10 mark/$6.60), Switzerland (10 franc/ $8.00), and Great Britain (5 pound/$7.75) are significantly more valuable than the one-dollar bill.

DOM-68 REPEAL THE SERVICE CONTRACT ACT

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	687	687	687	687	687	687	4,122
Outlays	652	687	687	687	687	687	4,087

The McNamara-O'Hara Service Contract Act of 1965 (SCA) sets basic labor standards for employees working on government contracts whose principal purpose is to furnish labor, such as laundry, custodial, and guard services. Contractors covered by the act generally must provide those employees with wages and fringe benefits that are at least equal to those prevailing in their locality or those contained in a collective bargaining agreement of the previous contractor. The latter provision applies to successor contractors, regardless of whether their employees are covered by a collective bargaining agreement.

The cost of services procured by the federal government could be reduced by repealing the SCA. That action would reduce outlays by about $652 million in 1997 and by about $4.1 billion over the 1997-2002 period, provided federal agency appropriations were reduced to reflect the anticipated reduction in costs.

Federal procurement costs would fall because the option would promote greater competition among bidders. Repealing the SCA would give contractors added flexibility that could allow them to reduce the costs of providing services. Opponents of this option are concerned that it would allow bidders to undermine existing collective bargaining agreements. In addition, repealing the SCA would reduce the compensation of workers in some firms that provide services to the government. Some supporters of keeping the provision argue that a reduction in compensation would, in turn, reduce the quality of such services.

DOM-69 REPEAL OR MODIFY THE DAVIS-BACON ACT

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
			Repeal the Davis-Bacon Act				
Discretionary Savings							
Budget authority	725	725	725	725	725	725	4,350
Outlays	166	425	566	634	675	701	3,167
Mandatory Savings							
Budget authority	41	31	28	28	28	27	183
Outlays	13	32	34	31	29	28	167
			Raise the Threshold to $1 Million				
Discretionary Savings							
Budget authority	241	241	241	241	241	241	1,446
Outlays	57	124	178	208	226	239	1,032
Mandatory Savings							
Budget authority	7	7	5	5	6	5	35
Outlays	4	6	6	6	6	5	33
			Raise the Threshold to $250,000				
Discretionary Savings							
Budget authority	66	66	66	66	66	66	396
Outlays	22	41	53	60	63	66	305
Mandatory Savings							
Budget authority	2	2	2	2	2	2	12
Outlays	2	2	2	2	2	2	12
			Change from Weekly to Monthly Wage Reporting				
Discretionary Savings							
Budget authority	58	58	58	58	58	58	348
Outlays	13	34	45	51	56	58	257
Mandatory Savings							
Budget authority	3	2	2	2	2	2	13
Outlays	1	3	3	2	2	2	13

Since 1935, the Davis-Bacon Act has required that "prevailing wages" be paid on all federally funded or federally assisted construction projects with contracts of $2,000 or more. The procedures for determining prevailing wages in the area of a construction project, as well as the classifications of workers who receive them, favor union wage rates in some cases.

The federal government could reduce outlays for construction by repealing the Davis-Bacon Act or by

modifying it. Repealing the act would reduce discretionary outlays by about $166 million in 1997 and by about $3.2 billion over the 1997-2002 period. Mandatory spending would fall by $13 million in 1997 and by $167 million over the 1997-2002 period. Raising the threshold for determining which projects are to be covered by Davis-Bacon from $2,000 to $1 million would exclude about 22 percent of the value of all contracts currently covered by the act. Savings in that case would total about $57 million in 1997 and about $1 billion over the six-year period in discretionary outlays and $4 million and $33 million, respectively, in mandatory spending. Raising the threshold to $250,000 would exclude about 8 percent of the value of all contracts and save about $305 million over the six-year period in discretionary spending and about $12 million in mandatory spending. Changing the requirements for wage-and-hour reporting for contracts covered by Davis-Bacon from a weekly to a monthly basis would reduce compliance costs for contractors by about $257 million over the six years in discretionary spending and $13 million in mandatory spending. Each of these estimates assumes that the Congress would reduce federal appropriations for agencies to reflect the anticipated reduction in their costs of construction.

Repealing Davis-Bacon or raising the threshold for projects it covers would reduce the cost of federal construction. In addition, either action would probably increase the opportunities for employment that federal projects might offer to less skilled workers. Such changes would, however, lower the earnings of some construction workers. Opponents of these options also argue that eliminating or relaxing Davis-Bacon requirements could jeopardize the quality of federally funded or federally assisted construction projects. Reducing the requirements for wage-and-hour reporting would lessen the paperwork required of employers, but at the same time it might diminish the effectiveness of the Davis-Bacon Act by reducing the government's ability to detect noncompliance.

Chapter Five

Entitlements and Other Mandatory Spending

Entitlement programs provide benefits to all who are eligible to receive aid and choose to participate. Social Security, Medicare, Medicaid, food stamps, and farm price supports are major federal entitlements. Spending on those and other so-called mandatory programs accounts for more than one-half of all federal outlays. In 1996, this category is expected to cost $875 billion--about 12 percent of gross domestic product (GDP).

Under current law, outlays for mandatory programs are expected to increase at an average annual rate of 6.6 percent between 1996 and 2002. Under the Congressional Budget Office's (CBO's) baseline with discretionary spending adjusted for inflation after 1998, the rest of federal spending is projected to rise by an average of 3.2 percent a year during the same period. If current policies continue, entitlements could constitute nearly two-thirds of all federal spending by early in the next century. The aging of the baby-boom generation is expected to drive the fraction still higher over succeeding decades. Hence, the job of managing the growth of federal spending will be largely a matter of controlling the growth of mandatory outlays.

Spending on entitlement programs is primarily determined by the programs' rules that govern eligibility, the extent of participation, benefit levels, and the cost of providing noncash benefits, not by the annual appropriation process. A variety of other factors also increase or decrease outlays for entitlements, including demographic shifts, changes in providers' practices, and rates of inflation. Annual entitlement spending is, therefore, only partly under the direct control of the Congress.

The total that is spent on entitlements has grown rapidly since the early 1960s. As a share of GDP, however, much of the increase had already occurred by about 1975. Steadily increasing spending for retirement and disability programs, plus the creation of Medicare and Medicaid in 1965, spurred the growth of federal entitlement outlays from less than 6 percent of GDP in the early 1960s to about 11 percent in 1975. Since then, the share of national production committed to entitlement programs has grown more slowly and is expected to be about 13 percent by 2002.

Factors Underlying the Growth in Mandatory Spending

The largest force behind the continued growth in entitlement spending is the rapid rise in spending on Medicare and Medicaid. Although growth in the two programs has slowed in the past year, federal spending on them is expected to increase at an annual rate of about 9.2 percent between 1996 and 2002 if policies are not changed. By contrast, spending on other entitlements is expected in grow at an annual rate of about 5.2 percent during that period without any changes in those programs. One convenient way

of analyzing growth in entitlement spending is to break it down by its major causes: growth in caseloads, automatic increases in benefits, growing use of medical services, and other factors (see Table 5-1).

Mounting caseloads account for about one-fifth of the growth in entitlement programs. Compared with this year's outlays, spending will increase as a result of caseload growth by an estimated $14 billion in 1997 and $76 billion in 2002. More than half of that growth is concentrated in the Social Security, Medicare, and Supplemental Security Income programs and is largely traceable to the continued growth in the population of elderly and disabled people. Much of the rest is in Medicaid. Among the "big three" programs, caseload growth alone boosts out-

Table 5-1.
Sources of Growth in Mandatory Spending (By fiscal year, in billions of dollars)

	1997	1998	1999	2000	2001	2002
Estimated Spending for Base Year 1996	875	875	875	875	875	875
Sources of Growth						
Increases in caseload	14	25	38	50	63	76
Automatic increases in benefits						
Cost-of-living adjustments	10	25	40	56	71	88
Other[a]	10	18	26	32	37	41
Other increases in benefits						
Increases in Medicare and Medicaid[b]	16	35	57	80	108	140
Growth in Social Security[c]	5	9	11	15	22	28
Irregular number of benefit payments[d]	4	4	4	9	0	5
Change in outlays for deposit insurance	5	8	8	7	8	9
Other sources of growth	7	12	12	17	22	24
Total	71	136	196	267	330	410
Projected Spending	946	1,011	1,070	1,141	1,205	1,285

SOURCE: Congressional Budget Office.

a. Automatic increases in Food Stamp and child nutrition benefits, certain Medicare reimbursement rates, and the earned income credit under formulas specified by law.

b. All growth not attributed to caseloads and automatic increases in reimbursement rates.

c. All growth not attributed to caseloads and cost-of-living adjustments.

d. Represents baseline differences attributable to assumptions about the number of benefit checks that will be issued in a fiscal year. Supplemental Security Income and veterans' compensation and pensions will pay 11 months of benefits in 1996 and 2001, 13 in 2000, and 12 in other years.

lays by 15 percent in Medicare, 16 percent in Social Security, and 21 percent in Medicaid over the 1997-2002 period.

Automatic increases in benefits account for about one-third of the growth in entitlement programs. All of the major retirement programs grant automatic cost-of-living adjustments (COLAs) to their beneficiaries. Those adjustments, which are pegged to the overall consumer price index, are expected to average about 3 percent a year through 2002. In 1996, outlays for programs with COLAs already amount to more than $460 billion, and COLAs are expected to add an extra $10 billion in 1997 and $88 billion in 2002.

Several other programs--chiefly Food Stamps, Medicare, and the earned income tax credit (EITC)--are also automatically indexed to inflation. The income thresholds above which the EITC begins to be phased out are automatically adjusted for inflation using the consumer price index. The Food Stamp program makes annual adjustments to its benefit payments according to changes in the Department of Agriculture's Thrifty Food Plan index. Medicare's payments to providers are based in part on special price indexes for the medical sector. (The link between inflation and Medicare spending is complicated, however, because indexing provided for under current law would actually reduce fees for some providers. In those cases, CBO assumed that no reduction would take place.) The combined effect of indexing for these programs is expected to contribute an extra $10 billion in outlays in 1997 and $41 billion in 2002.

Medicaid is the only major entitlement program that is not automatically indexed for inflation at the federal level, although spending levels are indirectly linked to inflation. Medicaid payments to providers are determined by the states, and the federal government matches those payments. If states increase payments, federal payments will rise. Higher payments to states are treated as other increases in Table 5-1.

Another third of the growth in entitlement spending stems from increases that cannot be attributed to growth in caseloads or automatic adjustments in reimbursements. Those sources of growth are expected to become more important over time. First, Medicaid grows with inflation even though it is not formally indexed (as discussed above). Second, the health programs have faced steadily rising costs per participant; that trend, which is known in Medicare jargon as "utilization" or "intensity," reflects a combination of more services per participant, more technological sophistication, and so forth. That residual growth in Medicare and Medicaid is projected to be $16 billion in 1997 and $140 billion in 2002.

In most retirement programs, the average benefit grows faster than the COLA alone would explain. Social Security is a prime example. Because new retirees have more recent earnings that have benefited from real wage growth, their benefits generally exceed the monthly check of a long-time retiree whose last earnings may have been a decade or two ago and who has been receiving only cost-of-living adjustments since then. And because more women are working now, more new retirees receive benefits based on their own earnings rather than a smaller spouse's benefit. In Social Security alone, such phenomena are estimated to add $5 billion in 1997 and $28 billion in 2002.

Depending on irregularities in the dates that payments are made, three programs--Supplemental Security Income and veterans' compensation and pensions --may pay 11, 12, or 13 monthly checks in a fiscal year.[1] Since only 11 checks will be mailed in the current fiscal year, spending in those programs is much higher in relation to the 1996 base in all years except 2001, which is also an 11-check year.

Most of the remaining growth in benefit programs stems from rising benefits for new retirees in the Civil Service, Military, and Railroad Retirement programs (fundamentally the same phenomenon as in Social Security); larger average benefits in unemployment compensation, a program that lacks an explicit COLA provision but pays amounts that are automatically linked to the recent earnings of its beneficiaries; increases in family support costs, largely at the discretion of state governments; and other sources. All of those factors together, however, are

1. The number of monthly benefit payments made during a fiscal year depends on whether October 1, the first day of the fiscal year, falls on a work day. If October 1 falls on a weekend, October benefits are paid on the last working day of September.

expected to contribute just $24 billion of the total $410 billion rise in mandatory spending in 2002 (compared with 1996).

Pay-As-You-Go Rules

Federal spending on entitlements is also influenced by the Balanced Budget and Emergency Deficit Control Act of 1985 (Deficit Control Act of 1985), which generally prohibits legislated changes in spending on entitlements and other mandatory programs or legislated changes in governmental receipts from increasing the deficit. Under the act, an entitlement program can be increased only if another one is cut or taxes or fees are raised. Similarly, a tax can be cut only if another one is increased or if entitlement spending is reduced. This requirement, which is called pay-as-you-go neutrality, applies not to each new law individually but to the total impact of all laws since 1990 that affect the relevant fiscal years.

This pay-as-you-go rule is qualified in several ways. For instance, increases in direct spending or tax cuts for designated emergencies are exempt from the requirement. That provision has only been used once--in March 1993--to extend Emergency Unemployment Compensation benefits. In addition, the Deficit Control Act of 1985 excludes the receipts and mandatory outlays of the Social Security retirement and disability trust funds from all calculations under the act, including the pay-as-you-go requirements. (Social Security is subject to its own set of rules, however, which are designed to hamper legislation that would lessen the balances in the trust funds.)

If the pay-as-you-go rule is violated, a sequestration--automatic cutbacks applying to nonexempt mandatory programs--must take place. But many of the major benefit programs (such as Social Security, federal employees' retirement, and most means-tested programs) are wholly exempt from the automatic cuts. In addition, other programs (including Medicare and guaranteed student loans) are subject to limited cuts. Those rules leave a relatively small portion of mandatory spending to bear the brunt of a large pay-as-you-go sequestration.

Program Trends and Options

In addition to suggestions for curtailing spending in specific programs, broad approaches to restraining the growth of entitlement spending have been suggested. One would place a cap on spending; another would apply a means test to restrict eligibility for benefits.

Many proposals have surfaced in the past that are aimed at placing an enforceable cap on mandatory spending. Those generally would tie the growth of spending for individual programs to inflation and the increase in the size of the eligible population. In many proposals, a transitional growth factor would be added, allowing the new policy to be phased in. Some proposals would also establish an across-the-board sequestration procedure to prevent a breach of the cap. Many advocates of this approach, however, have not accompanied the call for a mandatory cap with policy proposals to achieve the reductions in individual programs that would be needed to avoid sequestration. And in many cases, such a sequestration would involve large percentage cuts in benefits.

An across-the-board sequestration of mandatory programs could not be carried out easily, particularly if it was large. Government benefit checks and other mandatory spending could not simply stop flowing after the cap was reached without disrupting the lives of millions of people. Agencies in the executive branch could estimate the likely shortfall resulting from the cap and adjust all future payments to account for the effect of the limit, but that would involve an enormous amount of bureaucratic discretion and uncertainty about which benefits would actually be provided. Moreover, the courts would probably be asked to respond to the conflict between the legislation that authorized the mandatory spending and a sequestration of that spending.[2]

Applying a means test to entitlement programs has also been suggested as a broad strategy for curb-

2. For more information on using an enforceable cap, see Congressional Budget Office, *Mandatory Spending Control Mechanisms,* CBO Paper (February 1996).

ing the growth in such spending. One approach would control entitlements as a group through a form of means-testing under which benefits for people with the highest incomes would be cut most. Several ways of carrying out the means-testing approach are discussed in ENT-49.

The other options in this chapter would reduce the growth of entitlement spending on a program-by-program basis. For instance, new program rules could limit who qualifies for benefits or reduce the amount of benefits provided (see ENT-22, ENT-34, and ENT-43 for examples) or could reduce payments to providers of services (see ENT-21). Chapter 6, "Medicare and Medicaid: Deficit Reduction and Program Restructuring," considers ways to cut the Medicare and Medicaid programs over the next six years. Chapter 7, "Addressing the Impact of the Aging Population on the Long-Term Federal Deficit," discusses cost-saving proposals for the Medicare and Social Security programs over the next 75 years.

Social Security and Other Retirement and Disability Programs

Spending on Social Security, the largest entitlement program, is expected to total $348 billion in 1996 and to provide benefits to more than 43 million elderly and severely disabled workers and members of their families (see Table 5-2). Outlays for benefits have grown over the years as a result of the inclusion of new groups among those deemed eligible for benefits, more recipients among existing eligible groups, cost-of-living increases in benefits, and the higher real earnings--hence higher benefits--of newly retired workers. The Social Security Amendments of 1983 made major changes in the program to improve its financial standing. Although most changes involved financing and coverage, others delayed annual cost-of-living increases to recipients and made some benefits subject to taxation. The amendments also increased the age of eligibility for full retirement benefits from 65 to 67, phasing in the change during the first quarter of the next century.

Baseline projections for Social Security spending reflect the influence of the above factors on the program through 2002. The increase in the number of aged people benefiting from Social Security has slowed in recent years. Although that trend will continue for several more years, as the relatively small group of people born during the 1930s becomes eligible, it will be partially offset by the aging of the baby boomers as they move into their late 40s and early 50s, when disability incidence rates are higher.

Although the Social Security program has special rules under the Deficit Control Act of 1985 and is not included in the pay-as-you-go budget discipline, it nonetheless accounts for two-fifths of entitlement spending; cutting it would reduce the total budget deficit. Options to alter the program's benefit structure are considered in ENT-39 through ENT-42. In addition, restraint on the annual cost-of-living adjustment for Social Security is a major component of ENT-48, which considers non-means-tested retirement and disability entitlements.

Other retirement and disability programs--which will cost $77 billion in 1996, or about 9 percent of entitlement spending--are dominated by the government's civilian and military retirement programs. Spending on those programs is influenced by factors similar to the ones affecting Social Security, and outlays are expected to increase at like rates in CBO's baseline. ENT-27 and ENT-48 contain options that would modify benefits for former federal workers.

Means-Tested Entitlement Programs Excluding Medicaid

Means-tested entitlement programs include Food Stamps; Supplemental Security Income, which is for the low-income aged, blind, and severely disabled; family support payments (primarily Aid to Families with Dependent Children--AFDC); pensions for needy veterans who are aged or disabled; child nutrition (such as the School Lunch Program); and the refundable portion of the EITC, which benefits low-income working families with children. At $103 billion in 1996, expenditures on other means-tested programs represent approximately 12 percent of entitlement spending.

Table 5-2.
CBO Projections for Mandatory Spending Under Current-Policy Economic Assumptions (By fiscal year, in billions of dollars)

	Actual 1995	1996	1997	1998	1999	2000	2001	2002
			Means-Tested Programs					
Medicaid	89	96	105	115	126	138	152	166
Food Stamps[a]	26	26	28	30	31	32	34	35
Supplemental Security Income	25	24	28	30	33	38	35	40
Family Support	18	18	19	19	20	21	21	22
Veterans' Pensions	3	3	3	3	3	4	3	4
Child Nutrition	7	8	8	9	10	10	11	11
Earned Income Credit	15	18	20	21	22	23	23	24
Student Loans	4	2	2	2	3	3	3	3
Other	3	4	4	4	5	5	6	6
Total	191	199	217	234	252	274	287	312
			Non-Means-Tested Programs					
Social Security	333	348	365	383	402	422	444	467
Medicare[b]	177	196	216	236	257	279	303	329
Subtotal	510	544	581	620	660	702	747	795
Other Retirement and Disability								
Federal civilian[c]	43	44	46	49	51	54	57	60
Military	28	29	30	31	32	33	34	35
Other	5	5	5	5	5	5	5	5
Subtotal	75	77	81	84	88	92	96	100
Unemployment Compensation	21	24	26	27	28	29	30	31
Deposit Insurance	-18	-10	-5	-2	-2	-2	-2	-1
Other Programs								
Veterans' benefits[d]	18	17	19	19	20	21	19	20
Farm price and income supports	6	7	7	7	7	7	6	5
Social services	6	5	6	6	6	6	6	6
Credit reform liquidating accounts	-2	-7	-7	-6	-6	-6	-6	-6
Other	15	19	20	21	18	20	22	21
Subtotal	42	41	45	48	45	47	47	47
Total	631	676	728	777	818	868	918	972
			Total					
All Mandatory Spending	822	875	946	1,011	1,070	1,141	1,205	1,285

SOURCE: Congressional Budget Office projections, May 1996 baseline. These projections do not reflect the effects of the Omnibus Consolidated Rescissions and Appropriations Act, signed April 26, 1996.

NOTE: Spending for benefit programs shown above generally excludes administrative costs, which are discretionary.

a. Includes nutrition assistance to Puerto Rico.

b. Spending for Medicare excludes premiums, which are considered offsetting receipts.

c. Includes Civil Service, Foreign Service, Coast Guard, other retirement programs, and annuitants' health benefits.

d. Includes veterans' compensation, readjustment benefits, life insurance, housing programs, and the Universal Service Fund created in the Telecommunications Act of 1996.

After reaching their highest levels in 1994, caseloads in the AFDC program have decreased almost 10 percent, whereas Food Stamp caseloads have remained relatively stable. Annual federal spending for the refundable portion of the EITC rose from about $1 billion in the early 1980s to $9 billion in 1993, largely as a result of the expansions included in the Tax Reform Act of 1986 and the Omnibus Budget Reconciliation Act of 1990 (OBRA-90). As a result of changes in OBRA-93 that increased benefits for families, spending for the EITC is projected to double approximately, from $11 billion in 1994 to $20 billion in 1997, before leveling off. ENT-24, ENT-30, ENT-31, and ENT-34 would reduce federal spending on certain means-tested programs by targeting benefits more narrowly and limiting federal payments for administering some of those programs.

Subsidized student loans are another means-tested entitlement, although the restrictions are not as strict as for many means-tested programs. (Unsubsidized loans are also available for those students who are from families with higher income.) Students can borrow through these programs to attend post-secondary educational institutions. The annual budgetary cost of student loans--as well as that of other federal loan and loan guarantee programs--consists of the present value of current and expected future subsidies for loans that originate in that specific year. Student loans are much less directed toward needy students than are Pell grants, which are the main discretionary program providing aid to postsecondary students. CBO's baseline projections show program costs for student loans totalling between about $2 and $3 billion through 2002. ENT-20 through ENT-22 would reduce the federal cost of those loans by reallocating part of the cost to lenders, schools, students, and their families.

Aid to Jobless Workers

The Federal-State Unemployment Compensation Program (UC) and the much smaller federal Trade Adjustment Assistance (TAA) program are two entitlement programs that provide assistance specifically to unemployed workers. CBO's baseline for the UC program projects slow growth between 1996 and 2002, rising to around $31 billion in 2002. Unemployment compensation is included in the federal budget, but state laws set most of the benefit and tax provisions in the regular state programs, which provide the vast majority of benefits. Thus, states can generally offset federal options that would reduce regular UC spending, and permanent budgetary savings cannot usually be attributed to federal changes in regular UC rules. As a result, this chapter does not include federal options limiting regular UC benefits.

The TAA program offers income-replacement benefits, training, and related services to workers unemployed as a result of import competition. In 1996, the program provided about $200 million in benefits and services to around 40,000 recipients. ENT-28 would eliminate the TAA program.

Non-Means-Tested Veterans' Programs

Veterans' benefits constitute another category of federal entitlement spending. CBO projects that non-means-tested entitlement spending for veterans' compensation, readjustment benefits, life insurance, and housing programs will total about $17 billion in 1996, or about 2 percent of all entitlement spending during that year. ENT-43 through ENT-45 would restrict federal spending on veterans' benefits by limiting eligibility for certain programs and raising costs to participants. In addition, ENT-42 would reduce Social Security disability payments for some people who also receive veterans' compensation.

Farm Income Support Programs

Most farm programs will see substantial changes because of the recently enacted Federal Agricultural Improvement and Reform Act of 1996, which governs most federal support for farmers. In the major supported crops--wheat, corn and other feed grains, cotton, and rice--farmers will no longer need to set aside a portion of their cropland to be eligible for payments, as they have in many years. And unlike the practice in the past, the size of the direct payment generally will not change with commodity prices. Some protection from low prices remains, but at reduced levels. The result is that producers of these

major crops will respond more to the needs of the market and less to the requirements of government programs. Most analysts believe that this increased market orientation will be good for agriculture generally, though they recognize that some farmers will be hurt by changes in the federal safety net.

The new law also reforms the dairy program. For decades, prices of dairy products have been supported through direct government purchases. Such purchases will end in 1999. Dairy producers will still benefit from regulated prices--federal marketing orders require higher prices for milk sold for fluid (beverage) uses--but will have to look to international markets rather than the federal government as outlets for manufactured products.

The government also supports peanuts, tobacco, and sugar by different combinations of production controls, import restraints, and price-supporting loans. For those crops, most of the support farmers receive is through market prices that are kept artificially high by the government programs. The new farm law made changes that reduced federal outlays for peanuts and sugar. The tobacco program was not affected.

CBO projects spending for farm income support programs to be $6.6 billion in 1996, up from $5.8 billion in 1995. CBO also projects that mandatory spending in that category will rise to $7.2 billion in 1997 and then decline to $5.3 billion by 2002. (Agriculture also benefits from programs funded through appropriations. Such discretionary programs, including agricultural research and extension, some export promotion, and farm loan programs, are covered in Chapter 4.)

Four options reducing agricultural spending are included in this chapter. ENT-07 through ENT-09 would lower federal outlays by cutting programs that subsidize or promote exports of farm commodities. ENT-10 would increase an assessment that applies to growers and purchasers of tobacco.

User Fees and Other Changes in Direct Spending

Fees can be charged to users of resources, facilities, or services provided by the federal government to raise funds to help pay for them and to promote their more efficient use. Options describing modified or higher fees in a variety of areas are included in this chapter (ENT-01 through ENT-06, ENT-11, ENT-12, ENT-16 through ENT-19, ENT-23, ENT-50, and ENT-51). For example, the federal government could index nuclear waste disposal fees for inflation or establish charges for airport takeoff and landing slots.

Receipts from fees would be treated under the Deficit Control Act of 1985 as spending changes in entitlements or mandatory programs if the legislation changing the fees originated in an authorizing committee. In that case, the added receipts from fees would be credited to the pay-as-you-go scorecard.

ENT-01 RESTRUCTURE THE POWER MARKETING ADMINISTRATIONS TO CHARGE HIGHER RATES AND END DIRECT SUBSIDIES

	Annual Added Receipts (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Receipts	0	350	350	350	350	350	1,750

Hydroelectric power generated at 129 federally owned plants is sold by power marketing administrations (PMAs), which are agencies of the Department of Energy. In recent years those federally owned hydroelectric plants have generated about 4 percent of the electricity sold in the United States. Under current law, the PMAs must first offer to sell most of this power locally to rural electric cooperatives, municipal utilities, and other publicly owned utilities (collectively known as preference customers). Any excess PMA power not purchased by preference customers can be sold to investor-owned utilities. Current law requires that those sales be made at cost. This option would eliminate the requirement to offer PMA power first to preferred customers and would allow the PMAs to sell it to the highest bidder. It would also eliminate requirements that the Bonneville Power Administration (BPA) give preference to consumers in the Northwest over other regions, acquire nonfederal electricity to meet growing demands by its customers, and subsidize the residential customers of certain investor-owned utilities in the Northwest.

The continuing restructuring of markets for wholesale electric power is lowering prices for consumers throughout the nation. (Wholesale transactions are generally between power generators and local distribution companies.) The PMAs have long been among the cheapest sources of wholesale power. But the growing presence of low-cost, competitive suppliers and the rising operating costs of aging federal facilities make it unclear how much longer the federal cost advantage can last. Establishing a market rate for PMA power now, while market rates are still above federal rates, would reduce the current deficit. That change might also stem the need for future taxpayer support by stimulating the PMAs to make more cost-effective operating and investing decisions than in the past.

In 1995, the average cost for federal power ranged from 1.8 cents per kilowatt hour (kwh) for sales of the Western Area Power Administration to 2.9 cents per kwh for the BPA. Nationwide, the average cost for wholesale power appears to be about 3.6 per kwh, but current data on rates in the specific regions where the PMAs sell power are not available. Industry estimates indicate that market-based rates for wholesale power in individual PMA regions may be from 5 percent to 50 percent greater than the respective PMA rate. This option to establish market rates for PMA power assumes the administrations will raise rates by an average of 10 percent, although changes for specific PMAs and their specific power projects may diverge greatly from that average. The additional receipts generated by that increase and by the increased sales following an end to regional preferences would total about $200 million annually.

This option would also reduce operating costs of the Bonneville Power Administration by about $150 million a year by ending the agency's residential exchange program. That program is designed to lower the cost of electricity to residential customers of investor-owned utilities in the Pacific Northwest by requiring the BPA to purchase high-cost power from those utilities in exchange for low-cost federal hydroelectric power.

The additional revenues from this option could be used by the PMAs to repay the $14 billion that it cost to construct existing plants. In addition, the current practice of selling power below market rates leads to levels of electricity consumption in PMA service areas that are inconsistent with the govern-

ment's energy conservation and environmental objectives. Conversely, critics of this option argue that large rate increases that could result from it would adversely affect regional economies. Proponents of continuing to reserve PMA power for use by public utilities maintain that doing so is a more appropriate use of the government's hydroelectric resources than allowing private companies to profit from the sale of public resources. Proponents of the status quo also say that publicly owned utilities have encouraged widespread use of electricity (especially in rural areas) at low rates.

In 1995, the President signed legislation authorizing the sale of the smallest PMA, the Alaska Power Administration. The House Committee on Resources also approved legislation authorizing the sale of the Southeastern Power Administration.

ENT-02 CHANGE THE REVENUE-SHARING FORMULA FROM A GROSS-RECEIPT TO A NET-RECEIPT BASIS FOR COMMERCIAL ACTIVITIES ON FEDERAL LANDS

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	190	195	195	200	200	200	1,180
Outlays	145	190	195	195	200	200	1,125

The federal government owns more than 650 million acres of public lands--nearly one-third of the United States' land mass. Those public lands contain a rich supply of renewable and nonrenewable natural resources: timber, coal, forage for livestock, oil and natural gas, and many nonfuel minerals. Private interests are given access to much of the federal land to develop its resources and generally pay fees to the federal government based on the commercial returns realized. In many cases, the federal government allots a percentage of those receipts to the states and counties containing the resources, as compensation for tax revenues they did not receive from the federal lands within their boundaries. The federal government typically calculates those allotments on a gross-receipt basis before taking account of its program costs. The practice has an important disadvantage: it sometimes causes the federal government's program costs to exceed its share of receipts. Providing federal receipts-sharing on a net rather than a gross basis would reduce net federal outlays by $1.1 billion over the 1997-2002 period.

In most cases, the Forest Service is required to allot 25 percent of its gross receipts from commercial activities in the national forests to the respective states and counties. The Department of the Interior allots 4 percent of its timber receipts, an average of 18 percent of its grazing fees, and 4 percent of its mining fees from "common variety" materials to the states; the department's Minerals Management Service (MMS) allots 50 percent of its adjusted onshore oil, gas, and other mineral receipts to the states. (The MMS deducts 50 percent of its administrative costs from the gross-receipt calculation before distributing those payments. In effect, the states share 25 percent of the burden of those administrative costs.) On certain federal lands--specifically, national forests affected by protection of the spotted owl and the Oregon and California grant lands--payments to states and counties are based on an average of payments made in the past.

Federal savings would be substantial if the Congress required those agencies to deduct their full program costs from their gross receipts before paying the states. The regional jurisdictions would continue to receive the same allotted percentage of net federal receipts and would accrue receipt shares totaling about $800 million in 1997. Net federal outlays would be reduced by about $145 million in 1997 and by about $1.1 billion over six years. The projected savings are net of potential federal cost increases under the Payment in Lieu of Taxes (PILT) program. That program was established in 1976 to offset the effects of nontaxable federal lands on the budgets of local governments. The PILT payments to the states are partially reduced by the amount of revenue-sharing payments from federal agencies. Payments under the PILT program would increase if net program receipts were shared and the Congress appropriated such an increase.

Changing the revenue-sharing formula to a net-receipt basis would, in all probability, have a negative impact on the economies of the respective states and counties. A significant source of revenue for some states and counties would be reduced. That reduction in revenues might lead to serious cuts in state and county spending. To help alleviate that hardship, the federal agencies could switch gradually to the net-receipt basis over a period of several years.

ENT-03 CHARGE ROYALTIES AND HOLDING FEES FOR HARDROCK MINING ON FEDERAL LANDS

Addition to Current-Law Receipts	Annual Added Receipts (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Royalty on Net Proceeds	2	10	7	7	7	7	40
Royalty on Gross Proceeds	8	53	31	31	31	31	185
Reauthorize Holding Fee	0	0	34	34	34	34	136

The General Mining Law of 1872 governs access to hardrock minerals--including gold, silver, copper, and uranium--on public lands. Any holder of more than 10 mining claims on public lands must pay an annual holding fee of $100 per claim, and all claimholders must pay a $25 location fee when recording a claim. But, unlike producers of fossil fuels and other minerals from public lands, miners do not pay royalties to the government on the value of the hardrock minerals. Also, authorization to collect the current holding fee expires in 1998. Estimates place the current gross value of hardrock minerals on public lands at about $550 million--a sum that has diminished greatly in the past two years with increased patenting activity. (In patenting, miners gain title to public lands by paying a one-time fee of $2.50 to $5 per acre.)

The Congress has debated reform of the General Mining Law for the past several years. Most recently, the 104th Congress included reform measures as part of the Balanced Budget Act of 1995 (H.R. 2491), which the President vetoed. That reform would have required miners to pay a 5 percent royalty on the net proceeds from hardrock mining (that is, sales revenues minus the costs of mining, separation, and transportation). In the 103rd Congress, the House passed legislation (H.R. 322) that would have imposed an 8 percent royalty on the gross proceeds (that is, sales revenues) from mining.

This option considers two different types of 8 percent royalties that the Congress could impose on the production of hardrock minerals from public lands: one on net proceeds (as defined in H.R. 2491), and one on gross proceeds (as defined in H.R. 322). The option would also reauthorize the current holding fee when it expires in 1998 and assumes that such fees would be recorded as offsetting receipts to the Treasury. Total deficit reduction during the 1997-2002 period from a net proceeds royalty would be about $40 million. Over the same period, deficit reduction from a gross proceeds royalty would be about $185 million, and from reauthorization of holding and location fees, about $136 million. Those estimates assume that states in which the mining took place would receive 25 percent of the federal royalty receipts. They also assume that there would be no further patenting of public lands.

People in favor of mining law reform--many of them in the environmental community--argue that low holding fees and zero royalties reduce the costs of production from federal lands compared with those from private lands (where payment of royalties is the rule). That policy encourages overdevelopment of public lands. Mineral reform could help free land for other public purposes, such as recreation and wilderness conservation.

Opponents of reform argue that without free access to public resources, exploration for hardrock minerals in this country--especially by small miners--would decline. They also argue that royalties would diminish the profitability of many mines, leading to scaled-back operations or closure and, as a result, adverse economic consequences for mining communities throughout the western states. Because many mineral prices are set in world markets, miners would be unable to pass along new royalty costs to consumers.

Administrative costs to put a net proceeds royalty in place would most likely be greater than those for a gross proceeds royalty, both for the federal government and for miners.

ENT-04 REFORM PUBLIC LAND RECREATION FEE AND CONCESSIONS POLICIES

Addition to Current-Law Receipts	Annual Added Receipts (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Raise Recreation Fees	182	188	195	202	210	217	1,194
Reform Concessions Policy	0	0	5	10	15	20	50

The federal government owns and manages more than 650 million acres of land in the United States. The land is used for a wide variety of purposes, including recreation and associated private concessions for which the government is compensated by fees. Those fees may not provide the government with a fair return. Better pricing could decrease net federal outlays by $182 million in 1997 and by $1.2 billion over six years, alleviate overuse by reducing recreational activity, and encourage quality concessions.

Raise Recreation Fees. All federal agencies that hold major tracts of land allow recreational access and provide some services to visitors. The services range from maintaining rough hiking trails to operating fully developed recreational facilities, such as campsites and marinas. Entrance and user fees are charged at some locations. The Congress approved new and expanded fees in 1994, but those still cover only a small portion of the direct costs of service. For example, in 1996, the National Park Service will spend an estimated $245 million on visitor services and will recover less than $70 million in net fees. Requiring the Park Service to charge fees to cover those direct costs as well as the associated costs of collection would shift that burden to the beneficiaries of the services and improve pricing of public land use. Such fees would lower net federal outlays by $182 million in 1997 and by $1.2 billion over a period of six years.

Arguments against additional increases in fees reflect the view that the national parks and public lands are a vital and accessible part of our national heritage. The social benefits of visits to the parks--especially for the elderly and the poor--far exceed the costs of providing them. Visits should be encouraged, not discouraged by increasing fees.

Additional fee increases, however, would shift the costs of police protection and other services from taxpayers to the users of parks. The overcrowding that is now a problem at many parks could be alleviated by an appropriate fee structure. Visits by the poor and the elderly could be encouraged by free-access days or by the cross-subsidization of urban parks, in which fees collected at some parks would be used to offset the costs of maintaining others that have lower or no charges.

Reform Concessions Policy. Concession activities on public lands managed by the Park and Forest Services account for a substantial percentage of all federal revenues resulting from contracts awarding concessions on nondefense public lands. Remuneration to the government for those concession franchises is made partly in the form of fees. The level of the fee is one of the franchise agreement terms determined by the service provider's bid on the concession contract. In 1994, the Park Service collected approximately $16 million in concession fees, and the Forest Service collected approximately $2 million (from fees other than ski areas, net of payments to states). Reforming policy toward concessions for the Park and Forest Services could increase net offsetting receipts to the Treasury by about $5 million in 1999 and by approximately $50 million over six years.

In order to achieve those savings, legislative changes would be necessary to enhance the competitive bidding process for concessions, including repealing the preferential right of contract renewal that is currently granted to existing concessionaires. In addition, legislation would be needed to revise existing agency practices that govern concessionaires' deposits to and spending from bank accounts held by contractors.

Under the Concessions Policy Act of 1965, most Park Service concessionaires are granted a preferential right of contract renewal when their agreements expire. The Forest Service limits that right to smaller concessionaires, such as outfitters and guides, who have short-term agreements. Preferential right of renewal impedes competition because existing concessionaires may renew their contracts by matching any better offer received by the government. If that right is eliminated, more potential concessionaires are likely to invest resources in preparing bids for contracts, given the greater likelihood that those contracts will be awarded to new concessionaires.

Additional legislative changes would further enhance existing policies for competitive bidding. Agency solicitations for concession proposals would be required to assign weights explicitly reflecting the relative importance of different factors in the selection process, including contractor performance and experience, concession fees to the government, and facilities and services to be provided by the concessionaire. Further, except in very limited circumstances, agencies would be prohibited, once the agreement had been signed, from releasing concessionaires from contract terms and conditions, including franchise fee requirements.

Finally, under current agency practices, some concession contracts stipulate that a company must deposit a percentage of its gross receipts into an account for improvements of government-owned or concessionaire-owned facilities, as directed by the agency. Policy reform should limit the use of those funds to public facilities used by the concessionaire under the terms of its service agreement or to supporting facilities necessary for administering such facilities.

Arguments in favor of reforming concession policies reflect the view that the federal government can obtain a better return from concessionaires for the use of its lands. Reform measures that increase competition could improve the return to the government and the quality of visitor services. Reform measures that revise treatment of capital investments by concessionaires could remove incentives to use those funds for purposes not related to their contracts.

Arguments against reforming policies toward concessions include the view that concessionaires' capital improvement accounts provide agencies with funds necessary to supplement appropriations. Further, opponents argue that the agencies need more flexibility in evaluating contract proposals and making changes to terms and conditions after agreements have been signed.

ENT-05 RAISE GRAZING FEES ON PUBLIC LANDS

	Annual Added Receipts (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Receipts	9	14	16	16	16	16	87

The federal government owns and manages more than 650 million acres of land in the United States. The land is used for a wide variety of purposes, including grazing of privately owned livestock. Cattle owners compensate the government for use of the land by paying grazing fees. Those fees may not provide the public with a fair return. In addition, underpricing may lead to overuse. Better pricing could increase federal receipts by $9 million in 1997 and $87 million over six years and alleviate overuse by reducing grazing activity.

The Forest Service and the Bureau of Land Management administer livestock grazing on approximately 262 million acres of public rangelands in the West. Those lands provide ranchers with about 31,000 grazing allotments and, at current leasing rates, roughly 20 million animal-unit months (AUMs) of grazing each year. In 1990, the appraised value of public rangeland in six Western states varied between $5 and $10 per AUM. A 1993 study indicated that the Forest Service and the Bureau of Land Management spent $4.60 per AUM in that year to manage their rangelands for grazing. By contrast, the 1994 permit fee was set at $1.98 per AUM under the formula established by the Congress. (The 1996 fee is $1.35 per AUM under the current formula.) The 1993 weighted average lease rate for grazing on private lands in 11 Western states was $10.03 per AUM. Thus, the current fee structure may represent a subsidy for many of the ranchers who participate in the program.

Various proposals have been introduced in the Congress to increase grazing fees. The proposals would either adjust the fee-setting indexes to reflect livestock markets and leasing rates on private rangeland or replace the existing fee structure with a new, modified market value. An increase in federal receipts resulting from either of those measures depends on the degree to which ranchers reduce their use of AUMs in response to increased fees. One recent proposal would increase grazing fees to a base value of $3.96 per AUM over a period of three years. From the third year on, the fee would be adjusted according to a forage value index based on private land rents, and annual changes in the fee would not exceed 25 percent. The higher fee would increase federal receipts, measured against current law, by approximately $87 million during the 1997-2002 period. Those are the amounts that would be left in the Treasury after deducting the share of receipts paid to states and counties from the increased fees. They do not reflect any additional appropriations for range improvements that could result from added receipts.

Proponents of fee increases believe that low fees subsidize ranchers and contribute to overgrazing and deteriorated range conditions. As an alternative to setting fees administratively, grazing rights might be allocated through a competitive bid process such as that now used by the Forest Service in its Eastern and Southern regions. Disadvantages of that approach are high administrative costs and limited competition. In many cases, only the owners of private lands adjacent to federal lease tracts would be willing to bid for grazing rights. (Current law requires permit holders to own a base property near the federal lease tract). Permit holders are not granted complete control over third-party access to the permit area, but may hope to maintain control by owning and regulating the private lands surrounding the lease tract.

Opponents of increased fees for grazing on public lands believe that higher fees overstate the value of public lands compared with private properties that might be in better condition or offer more favorable lease terms. In addition, low fees encourage permit

holders to invest in range improvements. Further, increased fees would cut profit margins for ranchers who use public land, perhaps encouraging them to exceed the grazing limits and forgo range improvements. Between 1979 and 1983, ranchers spent 16 cents per AUM per year, on average, for range improvements. Under current law, the federal government allocates a fixed percentage of grazing-fee revenue to the Range Betterment Fund. The increase in federal expenditures on range improvements implied by higher fees would offset any decrease in private range improvements.

ENT-06 RECOVER COSTS ASSOCIATED WITH ADMINISTERING U.S. ARMY CORPS OF ENGINEERS PERMITTING PROGRAMS

	Annual Added Receipts (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Receipts	0	7	14	14	14	14	63

The Department of the Army, through the Army Corps of Engineers, administers laws pertaining to the regulation of the navigable waters of the United States, including wetlands. Section 404 of the Clean Water Act requires that any private, commercial, or government agent wishing to dredge or dump fill material in waters or wetlands of the United States must obtain a permit from the Corps. The Corps could recover a portion of its annual regulatory costs by increasing permit fees. Imposing one type of fee structure for section 404 of the Clean Water Act--a cost-of-service fee on commercial applicants--would generate revenue of $7 million in 1998 and $63 million over the 1998-2002 period.

In fiscal year 1995, the regulatory program budget of the Corps was $101 million, which primarily funded permitting activities. During that year, the Corps received approximately 62,000 applications for section 404 permits to discharge dredged or fill materials. Under section 404, the Corps is required to evaluate each permit application and approve or deny it on the basis of expert opinion and statutory guidelines. The bulk of those permits are quickly approved through outstanding general or regional permits that grant authority for many low-impact activities. Evaluation of permits not covered by outstanding permits may require the Corps to conduct detailed, lengthy, and costly reviews. Statutory requirements may include preparing an environmental impact statement (EIS) as required under the National Environmental Protection Act of 1969.

Fees levied for commercial and private permits cost $100 and $10, respectively. There is no charge for government applicants. Total fee collections fall far short of covering the costs of administering the permitting program, particularly those for applications requiring detailed review or the preparation of an EIS. Both the Administration's fiscal year 1997 budget and the Congressional coalition budget, H.R. 2530, include proposals to create fee structures that can recover a greater portion of the costs of administering the permitting program.

Proponents of higher fees would argue that parties seeking a permit, not the general tax-paying public, should bear the cost of permitting, and that because permit seekers are advancing a private interest, the benefits of which accrue to a private party, the costs should be borne by that party. Furthermore, society should not have to pay for a process that advances the interests of a comparative few.

Permit seekers might argue against increased fees from the standpoint of property rights. Why should property owners fund a process that may ultimately deny them the right to use their land as they choose? The goal of the section 404 permit program is to advance the public interest by protecting wetlands. Because society benefits from wetlands protection, often at the perceived expense of property owners, society should pay. Furthermore, say permit seekers, the regulatory process that property owners must navigate is already onerous; adding yet another cost would further infringe on property rights.

ENT-07 REDUCE LOAN GUARANTEES MADE UNDER THE USDA'S EXPORT CREDIT PROGRAMS BY ELIMINATING GUARANTEES FOR LOANS TO HIGH-RISK BORROWERS

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	91	146	144	143	148	151	823
Outlays	91	146	144	143	148	151	823

The government guarantees short- and intermediate-term loans made by commercial banks to finance foreign purchases of U.S. agricultural commodities, especially grains and oil seeds, and other agricultural products. The Department of Agriculture (USDA) may use these guarantee programs to increase U.S. exports, compete against foreign agricultural exports, and assist some countries in meeting their food and fiber needs, but it cannot use them for foreign aid, foreign policy, or debt rescheduling. Credit terms, in addition to price, are an important element of competition in world markets.

U.S. law requires that borrowers be creditworthy, but some borrowers are riskier than others. If a foreign buyer misses a loan payment, the bank making the original loan submits a claim to the USDA. The USDA reimburses the bank, takes over the loan, and attempts collection. The U.S. government typically guarantees 98 percent of the principal of the loan and a portion of the interest.

This option would limit annual guarantees to $3.3 billion--nearly $1 billion less than they would be under current law. The estimate of savings assumes that the reduction would derive from eliminating the guarantees for loans to high-risk borrowers, including but not limited to some countries in Eastern Europe and the republics of the former Soviet Union. That change would reduce outlays by $823 million over the 1997-2002 period, based on the subsidy value of the guarantees.

Proponents of reducing guarantees of credit to high-risk borrowers argue that the potential costs of those high-risk loans do not outweigh the benefits of the increase in U.S. exports, if any, resulting from them. Opponents of reducing the guarantees argue that the benefits do outweigh the potential costs. They maintain that the credit guarantees are vital in retaining the U.S. share of competitive world markets. (Some commodity groups believe that they would export less and receive lower prices for their products without the credits.) Opponents also argue that without the guarantees some countries could not meet their food and fiber requirements.

ENT-08 ELIMINATE THE EXPORT ENHANCEMENT PROGRAM

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	136	385	488	542	484	463	2,498
Outlays	136	385	488	542	484	463	2,498

The Department of Agriculture (USDA) subsidizes the export of agricultural commodities through the Export Enhancement Program (EEP). U.S. exporters participating in the EEP negotiate directly with buyers in a targeted country, then submit bids to the USDA for cash bonuses. The bids include the sale price, tentatively agreed to with the buyer, and the amount of the subsidy or bonus that has been requested by the exporter.

The signatories of the Uruguay Round agreements of the General Agreement on Tariffs and Trade have pledged to reduce both the volume of subsidized exports of agricultural products and budgetary outlays on export subsidies for those products. (The legislation to carry out the Uruguay Round agreements also removes the requirement in U.S. law that the EEP be used only as a response to unfair trade practices, so that it can be used more generally for market promotion and expansion.) Moreover, the 1996 farm bill caps the funding available for the EEP in each year through 2002. Although the Uruguay Round agreements and the 1996 farm bill could restrict the size and cost of the EEP in the future, they will not eliminate it.

Since the program's inception in 1985, the USDA has awarded $7.2 billion in bonuses, mostly to assist wheat exports. The Congressional Budget Office believes that eliminating the EEP would result in lower exports and prices; thus, it expects that increases in outlays for other farm programs would offset some of the savings from eliminating this program. On balance, eliminating the EEP would save about $2.5 billion during the 1997-2002 period.

On the one hand, the EEP may help to increase U.S. exports or maintain market share. On the other, it is not clear how effective the program has been as a counterweight to foreign subsidies, or how effective it will be under a broader mandate. Moreover, some critics argue that the EEP has depressed world commodity prices, thereby penalizing competitors who do not subsidize their exports.

ENT-09 ELIMINATE THE MARKET ACCESS PROGRAM

Savings from Current-Law Spending	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	6	70	90	90	90	90	436
Outlays	6	70	90	90	90	90	436

The Market Access Program (MAP), formerly known as the Market Promotion Program, was authorized under the 1990 Food, Agriculture, Conservation, and Trade Act to replace the Targeted Export Assistance Program and assist U.S. exporters of agricultural products. The program has been used to counter the effects of unfair trading practices abroad, but the Uruguay Round Agreements Act of 1994 eliminated the requirement that it be used for such purposes. Payments are made to offset partially the costs of market building and product promotion undertaken by trade associations, commodity groups, and some profit-making firms. On the basis of current law, the Congressional Budget Office assumes that $90 million will be allocated annually for the program in the 1997-2002 period. Eliminating the MAP would reduce outlays by $436 million over the next six years.

The program has been used to promote a wide range of mostly high-value products, including fruit, tree nuts, vegetables, meat, poultry, eggs, seafood, and wine. According to a recent report by the General Accounting Office, the Department of Agriculture (USDA) allocated an average of about 35 percent of the funding for the program in the 1991-1994 period to participants promoting brand-name products. The 1996 farm bill prohibits direct MAP assistance for brand promotions to foreign companies for foreign-produced products, or to companies that are not recognized as small business concerns under the Small Business Act, except for cooperatives and nonprofit trade associations.

Some critics of the program argue that participants should bear the full cost of foreign promotions because they benefit directly from them. (It is uncertain how much return, in terms of market development, the program has generated or the extent to which it has replaced private expenditures with public funds.) Some observers note the possibility of duplication, because the USDA provides marketing funds through the Foreign Market Development Cooperator Program of the Foreign Agricultural Service and other activities. Many people also object to spending taxpayer money on brand-name advertising.

Eliminating the MAP, however, could place U.S. exporters at a disadvantage in international markets, depending, in part, on the amount of support provided by other countries. Responding to concerns about duplication, some advocates of the MAP note that the program is different from other programs, in part because it has focused on foreign retailers and consumer promotions. People concerned about U.S. exports of high-value products consider the program a useful tool for developing markets and providing potential benefits for the economy overall.

ENT-10 INCREASE PRODUCER ASSESSMENTS TO PARTICIPANTS IN THE FEDERAL PROGRAM SUPPORTING THE PRICE OF TOBACCO

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	29	28	28	28	26	26	165
Outlays	29	28	28	28	26	26	165

The federal government aids producers of tobacco by supporting domestic prices above world market levels. Support comes from a combination of marketing quotas, price-supporting loans, and restrictions on imports. The support program benefits about 125,000 growers and 236,000 holders of marketing quotas. Some quota holders raise the crop themselves, and some rent their quota to growers.

Tobacco is a controversial crop because of the hazards of smoking, and federal support for producers has likewise been controversial. The program has been modified over time to reduce its costs to the taxpayer. In fact, it does nothing to encourage the use of tobacco. Rather, it raises the price of tobacco products to U.S. consumers, though the effect is quite small. The Department of Agriculture estimates that the program may increase the price of a pack of cigarettes by less than 2 cents. For producers, tobacco is an important source of income, particularly in some states. It was the sixth largest cash crop in the United States in 1994, when receipts to tobacco farmers totaled about $2.6 billion. Tobacco is produced in 21 states, and nearly two-thirds of the crop's acreage lies in North Carolina and Kentucky.

The cost of the tobacco price support program varies from year to year. The program can have substantial outlays in a given year--1994 outlays were $693 million--but if the program functions as intended, it should have no net cost to the government over time. The reason is that growers and purchasers of tobacco contribute to "no-net-cost accounts" that are used to reimburse the government for costs (excluding administrative costs) of the price support program. In addition to those contributions, growers and purchasers are each assessed 0.5 percent of marketings, valued at the nonrecourse loan rate. Those assessments, started in 1991, were introduced to reduce federal program costs and the budget deficit.

This option would double the current assessment on domestic producers in the tobacco programs. Doing so would bring in receipts of about $165 million over the 1997-2002 period.

Deficit reduction is the main benefit of increasing the assessment. Proponents argue that the government's program gives producers of tobacco substantial benefits, although the support is not in the form of direct payments. They argue that program beneficiaries should not escape the deficit reduction efforts experienced by producers of other supported commodities just because the mechanism of support is indirect. Opponents would argue that since this program adds little to the federal deficit, producers should not be assessed to reduce the deficit.

ENT-11 INCREASE FCC USER FEES

	Annual Added Receipts (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Receipts	61	63	66	68	71	73	402

Increasing the level of fees charged by the Federal Communications Commission to holders of FCC licenses could increase receipts by $61 million in 1997 and by $402 million from 1997 through 2002. The Congress passed legislation in the Omnibus Budget Reconciliation Act of 1993 that established new fees for certain types of licenses and increased fees for others. Those increases raised approximately $51 million in 1995 and are expected to raise $40 million in 1996. The fees, however, are earmarked for specific regulatory costs and do not cover all regulatory activities or agency overhead.

People who favor increasing licensing fees argue that the fees would cover the full cost of the services that the FCC provides to license holders. Those services include regulation, enforcement, rulemaking, and international and informational activities. The level of the fee would be adjusted for such factors as coverage of license holders' service areas and whether a license provides for shared or exclusive use. The level of fees provided in this estimate would be sufficient to cover the inflation-adjusted cost of FCC activities. Fees would be set lower if the FCC was restricted to the level of its 1996 funding.

People who argue against increasing FCC fees hold that such increases would drive marginal operators out of business. Low-power AM radio stations, for example, often maintain very small profit margins. A significant increase in the license fee of such a small operator could be sufficient to force the station to close. That difficulty could be overcome by linking fee increases to station coverage area or broadcast power. Moreover, the problem is less significant to license holders outside the broadcasting industry.

ENT-12 CHARGE A USER FEE ON COMMODITY FUTURES AND OPTIONS CONTRACT TRANSACTIONS

	Annual Added Receipts (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Receipts	45	64	68	73	78	84	412

The Commodity Futures Trading Commission (CFTC) administers the amended Commodity Exchange Act of 1936. The purpose of the commission is to allow markets to operate more efficiently by ensuring the integrity of futures markets and protecting participants against abusive and fraudulent trade practices. A fee on transactions overseen by the CFTC could cover the agency's costs of operation. Such a fee would be similar to one now imposed on securities exchanges to cover the cost of the Securities and Exchange Commission (SEC).

The Administration's budget for 1996 proposed a transaction fee, set at 10 cents per "round turn transaction." Such a fee, if imposed in 1997, could generate revenues of $412 million over the 1997-2002 period, which should be sufficient to cover the CFTC's operating expenses during that time. As proposed, the legislation to establish the fee would require the exchanges to remit it four times a year, based on trading volume during the previous quarter. The CFTC would collect the fee. Fee receipts could be classified as either revenues or offsetting receipts.

The main arguments in favor of the fee are based on the principle that users of government services should pay for those services. Participants in transactions that the CFTC regulates, rather than general taxpayers, are seen as the primary beneficiaries of the agency's operations and are therefore users who should pay a fee. Furthermore, the principle of charging such a fee has already been established by the SEC, as well as other federal financial regulators, such as the Office of Thrift Supervision and the Office of the Comptroller of the Currency. Considerations of equity and fairness suggest that not charging a comparable fee to support CFTC operations could give futures traders an unfair advantage over securities traders.

Those who argue against the fee say that such charges tend to encourage evasion by the people who would be subject to them. Users might try to avoid fees by limiting or shifting transactions to activities that are exempt from charges, which could conceivably cause a small fraction of market participants to desert U.S. for foreign exchanges. Major competing foreign exchanges, however, already charge user fees. Even with the proposed 10 cent transaction fee, U.S. futures exchanges may still enjoy a cost advantage over their major foreign competitors.

The Congressional Budget Office expects a user fee of 10 cents to cause only a negligible decrease in transactions because it is small in comparison with the fees already imposed by the exchanges themselves and the industry's self-regulatory organization, the National Futures Association. For example, a market user that is not a member of the Chicago Board of Trade pays a transaction fee of $1.24 on futures trades (a $1 exchange fee, a 10 cent clearing fee, and a 14 cent transaction fee imposed by the National Futures Association). Public participants in the futures markets also pay brokerage commissions typically ranging from $20 to $100 for each transaction. Thus, a 10 cent CFTC transaction fee is small compared with the total existing transaction costs of futures trading, and it would be unlikely to have a significant adverse effect on the volume of trading on domestic futures exchanges.

ENT-13 ELIMINATE THE FLOOD INSURANCE SUBSIDY ON PRE-FIRM STRUCTURES

	Annual Added Receipts (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Receipts	152	385	374	385	389	408	2,093

The National Flood Insurance Program (NFIP) offers insurance at heavily subsidized rates for buildings constructed before January 1, 1975, or before the completion of a participating community's "Flood Insurance Rate Map" (FIRM). Owners of post-FIRM construction pay actuarial rates for their insurance. Currently, 18 percent of all flood insurance coverage is subsidized. If all of the subsidized policyholders maintained their coverage at the higher rates, eliminating the subsidy would produce six-year receipts on the order of $2.5 billion. Because many policyholders would be likely to drop their coverage under this option, however, the Congressional Budget Office estimates that new receipts would total about $2 billion over the next six years.

The Federal Emergency Management Agency (FEMA), which administers the flood insurance program, estimates that 37 percent of policyholders are paying subsidized rates for some or all of their coverage. The program subsidizes only the first $35,000 of coverage for a single-family or two- to four-family dwelling, and the first $100,000 of a larger residential, nonresidential, or small business building; various levels of additional coverage are available at actuarially neutral rates. As a result of an April 1996 rate increase, coverage in the subsidized tier is priced at an estimated 39 percent of its actuarial value. The program also offers insurance for buildings' contents; again, policyholders in pre-FIRM buildings pay subsidized prices for a first tier of coverage.

Some subsidized NFIP policyholders purchased their coverage voluntarily, but others did so because of a statutory requirement prohibiting federally insured mortgage lenders from making loans on uninsured properties in "special flood hazard" areas. Despite the subsidies and mandatory purchase requirement, participation remains low. The report of the Interagency Floodplain Management Review Committee estimated that only 20 percent of structures in the nine states of the 1993 Midwest floodplain carried insurance, reflecting both low rates of purchase for properties not subject to the mandatory requirement (which include an estimated one-half of owner-occupied homes) and the apparent unwillingness or inability of many lenders to enforce the mandatory requirement. The Congress included measures to increase compliance with the mandatory requirement and otherwise boost NFIP participation in the National Flood Insurance Reform Act of 1994. These provisions can be expected to reduce the percentage of current policyholders who would drop their coverage if the subsidies were eliminated, but the Congressional Budget Office estimates that a significant percentage would do so nonetheless.

Proponents of eliminating the subsidy argue that actuarially correct prices would make all property owners in flood-prone areas pay their fair share for insurance protection, and would give them economic incentives to relocate or take preventive measures.

One counterargument asserts that the subsidy should be maintained as part of an effort to increase the low rates of participation by property owners who are not subject to the mandatory purchase requirement. A second argument is that people who built or purchased property before FIRM documented the extent of the flood hazards should not face the same costs as those who made decisions after such information became available. Defenders of the current rates also question the accuracy of FEMA's actuarial tables; although the current prices cover only 39 percent of estimated average costs over the long run, based on FEMA's mapping exercises, they are roughly equal to average losses incurred in the program to date. Finally, defenders argue that some of

the projected benefit to the Treasury will be offset by increased spending by FEMA and the Small Business Administration on disaster grants and loans to people who drop or fail to purchase insurance coverage at the higher rates.

ENT-14 EXTEND AND BROADEN THE FCC'S AUTHORITY TO USE AUCTIONS TO ASSIGN LICENSES TO USE THE RADIO SPECTRUM

	Annual Added Receipts (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Receipts	0	700	1,000	1,200	1,400	1,700	6,000

The Omnibus Budget Reconciliation Act of 1993 granted the Federal Communications Commission (FCC) authority to auction new licenses to use the radio spectrum. The authority, however, was limited to a five-year period ending on September 30, 1998, and did not apply to many classes of new licenses. The law excluded licenses issued to profit-making businesses that did not charge a subscription fee for telecommunications services. Exemptions included licenses allowing the holders to use the spectrum for such private networks as intracorporate wireless communications systems and permits for intermediary links in the delivery of communications service, such as frequencies used for microwave relays by long-distance telephone companies.

Extending the FCC's authority to auction licenses beyond 1998 and broadening the commission's auction authority to include any license sought by a private business, except nonsubscription terrestrial broadcasting licenses, would increase receipts by $6 billion from 1998 through 2002. Under this option, however, the commission would continue to award licenses to private businesses by comparative hearing when there were not mutually exclusive applications for a band of frequencies. The FCC has conducted eight successful sales raising more than $20 billion since it was granted the authority to auction licenses. Just how much this option would add to current-law receipts, however, is uncertain. Both telecommunications markets and technologies are changing rapidly and at times unpredictably. The market for licenses used for a variety of private purposes is untested. Moreover, the technical attributes and regulatory limitations carried by the licenses will not be known until the commission allocates frequencies for specific uses. The commission's future actions will have a significant effect on the value of those licenses.

The case for extending the FCC's authority to auction the spectrum and to sell other valuable rights under its regulatory umbrella begins with recognition that the commission has successfully used the auction authority granted to it by current law. The process has gone smoothly, the public is receiving a share of the economic value of the airwaves, and licenses are being awarded promptly to the parties that value them most. Critics of the initial auction statute predicted a very different outcome.

Advocates of broadening the FCC's auction authority argue that current law draws a false distinction in treating the frequencies used to produce one private good or service in another way than those used to produce a different private good or service. From this point of view the radio spectrum is a scarce resource. The cost to society of using frequencies in one way translates as benefits that might have been gained by using them in another way. That cost is not changed by the fact that a private network or intermediary use is once-removed from the ultimate consumer of a good or service.

The case against the option emphasizes a go-slow approach. Early auctions have been successful. Critics might argue that broadening the law to include private networks and intermediary links will increase the cost to businesses seeking to innovate in these areas, thus discouraging the development of new telecommunications technologies and applications. Additionally, some people are concerned that if the United States auctions satellite slots and the associated spectrum, other countries will follow suit, compounding the increased costs to business.

The option considered is only one that would increase receipts collected by the FCC above the level

anticipated under current law. Proposals that would direct additional spectrum to be cleared of current users and made available for auction would increase estimated receipts. Alternatively, the Congress could impose an annual fee on the holders of licenses who did not obtain them at auction, or auction all of those licenses not originally assigned by auction at the time of their renewal. Other extensions of the FCC's authority to auction that are not included in this option are those allowing license holders to pay for the right to use their spectrum assignments more flexibly and allowing the commission to auction blocks of spectrum without specifying a use.

ENT-15 AUCTION ADVANCED TELEVISION LICENSES

	Annual Added Receipts (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Receipts	0	2,500	5,000	5,000	0	0	12,500

The impending transition to advanced television will allow more efficient use of the radio spectrum and could generate additional receipts between 1998 and 2002. Under one option that would auction new slots for television broadcasting--the "second-channel auction"--receipts could increase by $12.5 billion between 1998 and 2000. Alternatively, the Administration has proposed an option referred to as the "analog return plan" that accelerates the Federal Communications Commission's (FCC's) current advanced television transition plan and could increase receipts by $10.8 billion in 2002. The receipts in that option vary depending on the specifics of legislative proposals that direct the FCC to make available and auction additional commercially attractive parts of the radio spectrum.

The radio "spectrum" does not exist as a physical object; rather, it is a conceptual tool used to organize and map a set of physical phenomena. Electric and magnetic fields produce waves that move through space at different frequencies (defined as the number of times that a wave's peak passes a fixed point in a specific period of time), and the set of all possible frequencies is called the electromagnetic spectrum. The subset of frequencies from 3,000 hertz (cycles per second) to 300 billion hertz--or 3 kilohertz to 300 gigahertz--is known as the radio spectrum.

Currently, just over 400 megahertz (MHz) of the radio spectrum in several frequency blocks between 54 MHz and 806 MHz is allocated to television broadcasting. Adopting digital technology will decrease interference problems and allow those frequency bands to accommodate twice as many 6 MHz slots--the amount of spectrum now granted a single analog television channel--for television broadcasting. Using digital television technology, each of those slots could be subdivided into four to six channels of the current quality, or used as a block to provide a single channel of improved quality television--so-called high-definition television. In order to watch digital television, however, viewers will need to replace their current TV sets or acquire converter devices similar to those now used by direct broadcast satellite subscribers.

The FCC plans to provide each holder of a broadcast license with an additional 6 MHz slot, a second channel, without charge. During a transition period of 10 to 15 years, broadcasters would have the use of their old analog slot and the new digital slot, allowing them to transmit both an analog and a digital signal and allowing viewers time to adopt the new technology. At the end of the transition, broadcasters would stop transmitting the analog signal and would return that spectrum to the FCC for allocation to other uses. Ultimately, the new digital channels could be "repacked" and accommodated within about 60 percent of the spectrum that is now allocated to television broadcasting in order to free up large contiguous blocks of spectrum for other uses. According to the FCC, about 150 MHz of spectrum would be available for auction after the transition.

Two proposals that would either modify or significantly change the FCC's preliminary plan have received significant public attention. One, the second-channel auction, would create a number of new digital slots equal to the number of analog channels. As early as 1997, the new digital slots would be auctioned to the highest bidders, who would be required to offer a minimum amount of digital broadcast service but would otherwise be free to put any excess spectrum to whatever use was most profitable and did not interfere with the rights of other license holders. Analog broadcast licensees could continue to broadcast and be permitted to buy a digital slot with-

out selling their analog channel. To that end, legislation would have to specify relief from current limits on station ownership. Current licensees could also convert their analog license to a digital license after a period of time and notification to their service area.

Alternatively, the Administration has proposed to accelerate the Federal Communications Commission's plan to auction the returned analog spectrum. The key departure from the FCC plan as described above is that the transition period would not extend beyond 2005, and the rights to use the new spectrum would be auctioned in 2002--three years before the winning bidders could use it.

The social benefit of either of those transition plans is that the bands of spectrum now dedicated to television broadcasting would be used more efficiently. In particular, the second-channel auction would put the unused portions of the television bands in use by those who value it most in the very near future. It also avoids any issue of a "giveaway" to current broadcasters and any inefficiencies or inequities associated with a centrally planned cutoff of analog television. Either auction would satisfy those who believe that the current FCC plan could change in time and that the incumbent broadcasters might not return the old analog licenses. Either auction would also yield substantial benefits to the Treasury.

Opponents of both auction plans argue that the current FCC plan is the only way to keep free, over-the-air television in a digital world without disenfranchising millions of viewers. Some argue that the move from the old standard to the new one should be seen as a continuance of current license rights (for which many license holders paid substantial amounts of money when they bought television stations from previous owners) rather than new licenses. Those opponents argue that many television stations--especially rural and low-revenue urban broadcasters--will barely be able to pay for the new equipment needed to broadcast digital signals and would not have the resources to compete for licenses at auction. In addition, advocates of the current FCC plan hold that, unlike the analog return plan, it provides consumers with the benefits of improved television and smooths the transition for both manufacturers and consumers from old to new television sets.

ENT-16 IMPOSE USER FEES ON THE INLAND WATERWAY SYSTEM

	Annual Added Receipts (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Receipts	204	421	434	447	460	474	2,441

The Congressional Budget Office estimates that the Congress annually appropriates about $450 million for the nation's system of inland waterways. Of that total, about $340 million is for operation and maintenance (O&M) and about $110 million is for construction. Current law allows up to 50 percent of inland waterway construction to be funded by revenues from the inland waterway fuel tax, a levy on the fuel consumed by barges using most segments of the inland waterway system. All O&M expenditures are paid by general tax revenues.

Imposing user fees high enough to recover fully both O&M and construction outlays for inland waterways would reduce the federal deficit by $204 million in 1997 and $2.4 billion during the 1997-2002 period. The receipts could be considered tax revenues, offsetting receipts, or offsetting collections, depending on the form of the implementing legislation. Receipts could be increased by raising fuel taxes, imposing charges for lockage, or imposing fees based on the weight of shipments and distance traveled. These estimates do not take into account any resulting reductions in income tax revenues.

The advantage of this option is the beneficial effect of user fees on efficiency. Reducing subsidies to water transportation should improve resource allocation by inducing shippers to choose the most efficient transportation route, rather than the most heavily subsidized one. Moreover, user fees would encourage more efficient use of existing waterways, reducing the need for new construction to alleviate congestion. Finally, user fees send market signals that identify the additional projects likely to provide the greatest net benefits to society.

The effects of user fees on efficiency would depend in large measure on whether the fees were set at the same rate for all waterways or according to the cost of each segment. Since costs vary dramatically among the segments, systemwide fees would offer weaker incentives for cost-effective spending because they would cause users of low-cost segments to subsidize users of high-cost segments. Fees based on costs of each segment, by contrast, could cause users to abandon high-cost segments of the waterways.

One argument in favor of federal subsidies is that they may promote regional economic development. Assessing user fees would limit this promotional tool. Reducing inland waterway subsidies would also lower the income of barge operators and grain producers in some regions, but those losses would be small in the context of overall regional economies.

ENT-17 ESTABLISH CHARGES FOR AIRPORT TAKEOFF AND LANDING SLOTS

	Annual Added Receipts (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Receipts	500	500	500	500	500	500	3,000

The Federal Aviation Administration (FAA) has established capacity controls at four airports: Kennedy International and La Guardia in New York, O'Hare International in Chicago, and Washington National in the District of Columbia. This proposal would charge annual fees for takeoff and landing rights at those airports.

Takeoff and landing slots were instituted in 1968 to control capacity and were allocated without charge by the FAA. A total of about 3,500 air carrier slots exist, and there are an additional 1,400 commuter and general aviation slots at the four FAA-controlled airports. Airlines are allowed to buy and sell slots among themselves with the understanding that the FAA retains ultimate control and can withdraw the slots or otherwise change the rules for their use at any time. The slots have value because the demand for flights at times exceeds the capacity of the airports and the air traffic control system.

Estimating the revenue from slot charges is difficult. Airlines generally have not reported the prices they have paid for slots, and even when the value of a transaction is available, the slot value is unclear because slot sales often include other items of value, such as gates. In addition, slot values vary by airport, time of day, season, and other factors. Because the FAA reserves the right to withdraw and add slots and change the rules affecting their use, airlines that buy slots from other carriers must factor in uncertainty when deciding how much a slot is worth. The amount of revenue that could be obtained from annual charges would depend on similar factors, including the length of the lease. For those reasons, the Congressional Budget Office's estimates are somewhat equivocal. Revenues are estimated to be about $500 million annually and $3 billion over the 1997-2002 period. But they could be higher or lower depending on the structure of the leasing arrangements --such as length, whether slots could be subleased, and usage requirements--as well as market conditions affecting the airline industry.

The main argument in favor of establishing charges for slots is that since the slots reflect the right to use scarce public airspace, airports, and air traffic control capacity, private firms and individuals should not receive all the benefits that result from that scarcity. Instead, they should share it with the public owners of the rights. Further, the charges would serve as incentives to put those scarce resources to their best use.

The main argument against this proposal is that the scarcity of slots at the four airports arises principally from a lack of land and runway space; the fees are not intended to provide increased capacity. Further, if the current prices paid by airlines in the private sale of slots already accurately reflect their value, this proposal might not produce a better allocation of those scarce resources; the result would be only a redistribution of the benefits from their use between the private and public sectors.

ENT-18 ESTABLISH USER FEES FOR AIR TRAFFIC CONTROL SERVICES

	Annual Added Receipts (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Receipts	790	1,627	1,675	1,726	1,777	1,831	9,425

The Federal Aviation Administration (FAA) manages the air traffic control (ATC) system, which serves commercial air carriers, military planes, and such smaller users as air taxis and private planes. Services provided include air traffic control towers that assist planes in takeoffs and landings, air route traffic control centers that guide planes through the nation's airspace, and flight service stations that assist smaller users. The FAA employs more than 17,000 air traffic controllers as well as sophisticated software to perform those tasks. The total cost of operating, maintaining, and upgrading the ATC system was about $6.5 billion in 1995.

About half of the operating cost of ATC is financed through annual appropriations from the general fund. Appropriations from the Airport and Airway Trust Fund pay for the other half of ATC operations and for facilities and equipment, research, engineering and development, and such non-ATC activities as airport improvement. Until January 1, 1996, the trust fund was financed by excise taxes on airline passenger tickets, international departures, cargo, and fuel used by general aviation. Those taxes have expired. Whether or not they are reinstated, they do not affect this option because the receipts from this option would cover the portion of ATC costs borne by the general fund. The receipts could be considered tax revenues, offsetting receipts, or offsetting collections, depending on the form of the implementing legislation. These estimates do not take into account any resulting reductions in income tax revenues.

Over the past two years, several proposals have been advanced for reorganizing the FAA and spinning off its air traffic control functions to a private or quasi-public corporation. Such an entity would have to charge users for its services. If air traffic control remains within the FAA, the agency could impose user fees to cover the portion of ATC costs paid by the general fund.

Users could be charged according to the number of facilities they used on a flight and the marginal costs of their use at each facility. If users paid the marginal costs that the ATC system incurs on their behalf, the deficit would be reduced by about $790 million in 1997 and $9.4 billion over the 1997-2002 period. This assumes that the new charges would be levied in the middle of fiscal year 1997. The savings in this option are based on estimates of marginal costs made in 1987, adjusted for inflation. The FAA expects to publish revised and updated cost estimates in the summer of 1996.

Levying fees that reflect costs would encourage users to moderate their demands. Small aircraft operators might cut back on their consumption of ATC services, freeing controllers for other tasks and increasing the overall capacity of the system. An additional benefit of efficient fees is that, on the basis of user response, planners can judge how much new capacity is needed and where it should be located.

The main argument against this option is that it would raise the cost to users of ATC services. Such a move could weaken the financial condition of commercial air carriers. For general aviation, it also could cause a decline in the demand for small aircraft produced in the United States.

ENT-19 INCREASE USER FEES FOR FAA CERTIFICATES AND REGISTRATIONS

	Annual Added Receipts (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Receipts	3	3	4	4	5	5	24

The Federal Aviation Administration (FAA) oversees a large regulatory program to ensure safe operation of aircraft within the United States. It oversees and regulates the registration of aircraft, licensing of pilots, issuance of medical certificates, and other similar activities. The FAA issues most licenses and certificates free of charge or at a price well below its cost to provide such regulatory approvals. For example, the current fee for registering aircraft is $5, but the cost to the FAA of providing the service is closer to $30. The FAA estimates the cost of issuing a pilot's certificate to be $10 to $15, but it does not charge for one. Imposing fees to cover the costs of the FAA's regulatory services could increase receipts by an estimated $24 million over the 1997-2002 period. If those fees were credited to the FAA's operations account as offsetting collections (as is the current general aviation registration fee), the agency's appropriation could be reduced by a corresponding amount without reducing its budget. Net savings could be somewhat smaller than those shown if the FAA needed additional resources to develop and administer fees.

The Drug Enforcement Assistance Act of 1988 authorizes the FAA to impose several registration fees as long as they do not exceed the agency's cost of providing that service. For general aviation, the act allows fees of up to $25 for aircraft registration and up to $12 for pilots' certificates (plus adjustments for inflation). Setting higher fees would require additional legislation. The FAA has initiated a rulemaking proceeding to consider raising those fees. Imposing other fees may require legislation; they could be authorized under legislation that the Congress is considering to overhaul the FAA.

Increasing regulatory fees might burden some aircraft owners and operators. That effect could be mitigated by scaling registration fees according to the size or value of the aircraft rather than the cost to the FAA. FAA fees based on the cost of service, however, would be comparable to automobile registration fees and operators' licenses and probably not out of line with their value.

ENT-20 REDUCE SUBSIDIES FOR LOANS TO STUDENTS AND PARENTS

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
	Raise the Loan Origination Fee						
Outlays	190	285	305	320	335	350	1,785
	Charge All Student Borrowers Interest While They Are Attending School						
Outlays	1,465	2,180	2,205	2,280	2,395	2,515	13,040
	Charge All Student Borrowers Interest During the Six-Month Grace Period						
Outlays	295	435	435	450	470	495	2,580
	Raise Interest Rates on Student Loans After the Six-Month Grace Period						
Outlays	260	415	445	470	490	515	2,595
	Raise Interest Rates on Loans to Parents						
Outlays	120	135	155	175	180	190	955

Federal student loan programs afford postsecondary students and their parents the opportunity to borrow funds to attend school. The Higher Education Amendments of 1992 created a "subsidized" program for students defined as having financial need. It also created two "unsubsidized" programs, one for students from families with greater financial resources and another for parents of students. In the subsidized program, the federal government incurs interest costs on the loans while the students are in school and during a six-month grace period after they leave. In the unsubsidized programs, borrowers are responsible for the interest costs, although for students, payments can be made after they leave school. The government recoups part of the cost of those programs by collecting between 3 percent and 4 percent of the face value of each loan as an origination fee.

Borrowers benefit from both the subsidized and unsubsidized programs because the interest rate they are charged is tied to the cost of borrowing by the federal government. Although the government provides no budgeted subsidy in allowing borrowers access to funds at this low rate, the rate is considerably lower than that charged most borrowers in the private credit market. In addition, the economic subsidy is larger in the subsidized program because interest is not charged until six months after the students leave school, whereas it begins to accrue immediately in the unsubsidized programs.

Federal costs could be reduced by increasing the loan origination fee charged to borrowers or by increasing the interest charged to borrowers on new loans. Interest charges on loans to students could be raised by increasing the interest rate charged after they leave school, or by requiring that loans to all students accrue interest while the students are in school or in the six-month grace period after they leave. Interest charges on loans to parents could also be raised.

Raise the Loan Origination Fee by 1 Percentage Point. Raising the origination fee on loans by 1 per-

centage point would reduce federal subsidies by a total of $1.8 billion during the next six years. It would, however, reduce the subsidies to borrowers, including those with the fewest financial resources. An alternative, which would exempt many lower-income borrowers, would raise the fee only in the unsubsidized program. That version would, however, limit the savings to $750 million over the 1997-2002 period.

Charge All Student Borrowers Interest While They Are Attending School or During the Six-Month Grace Period. Another option would be to require that loans to all borrowers in the subsidized program accrue interest from the time the students borrow, as is now the case in the unsubsidized program. Doing so would eliminate the difference between subsidized and unsubsidized loans. Charging interest on all new loans while borrowers were in school, but deferring actual payments until after they left, would reduce federal outlays by $13.0 billion between 1997 and 2002.

A variation of this option that would reduce but not eliminate the subsidy given to lower-income borrowers would require all loans to begin accruing interest immediately after the students left school, thereby eliminating the current six-month grace period for subsidized borrowers. Under this option, borrowers would continue to be allowed a period of six months before the first payment was due. That approach would save about $2.6 billion over the 1997-2002 period.

These measures would not cause cash flow problems for students while they were in school because they would be allowed to defer interest payments during that period. Since the added costs would generally occur only after leaving school--when borrowers would be better able to afford them--most students would still be able to continue their education. By concentrating the reductions on the subsidized loan program, however, these options would have the greatest impact on lower-income borrowers.

Raise Interest Rates on Student Loans After the Six-Month Grace Period. Federal subsidies could also be reduced by raising the interest rate charged on loans to students after the six-month grace period. Currently, the rate is a variable one (tied to the cost of borrowing by the federal government) with a fixed maximum. Raising the interest rate and the interest rate cap on all new loans by 0.5 percentage points would reduce federal spending by $2.6 billion during the 1997-2002 period.

An advantage of this option is that it would raise the cost of the program to borrowers after they left school, when they could better afford it. It would also lower federal costs significantly and continue to provide economic subsidies to borrowers in the subsidized program. The larger payments that would result from this change might, however, cause some students (especially needy students) to limit their choices to lower-priced institutions or possibly not to attend school. (Reflecting the available evidence, however, these estimates assume that all borrowers would continue to attend postsecondary schools and would continue to borrow the same amounts).

As with raising the loan origination fee, this option could be applied only to borrowers in the unsubsidized loan program. Doing so would generally limit the effect of the change to students from families with greater financial resources and to parents, but it would also lower the savings to $1.0 billion between 1997 and 2002.

Raise Interest Rates on Loans to Parents by 1 Percentage Point. Federal outlays could be reduced by raising the interest rate and the interest cap on all new loans to parents by 1 percentage point. This option would reduce federal outlays by $955 million between 1997 and 2002 and continue to provide economic subsidies for many parents. Again, the larger payments that would result from this change might cause some students (particularly those from lower-income families) to limit their choices of schools or to forgo further education entirely.

ENT-21 RAISE THE COST OF THE STUDENT LOAN PROGRAM TO LENDERS, GUARANTY AGENCIES, AND SCHOOLS

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Raise the Lender Origination Fee							
Outlays	65	85	80	80	80	90	480
Lower the Default Reimbursement Rates							
Outlays	30	45	40	40	45	45	245
Eliminate the Fee Paid to Loan Originators							
Outlays	45	70	80	90	95	95	475

The Higher Education Amendments of 1992 created two programs providing loans for students to attend postsecondary schools: the Federal Family Education Loan Program (FFELP) and the Federal Direct Loan Program. Under FFELP, banks provide the capital for the loans. State and private nonprofit guaranty agencies insure lenders against losses that arise if students default on their loans. In turn, those agencies are reinsured by the federal government. In the direct loan program, the federal government provides the loans directly to students through their schools.

The government recoups part of the cost of FFELP by collecting 0.5 percent of the face value of each loan from lenders as an origination fee. In addition, the government recoups part of the cost of defaults from guaranty agencies. Until their default rates exceed 5 percent, guaranty agencies are reimbursed for 98 percent of the value of their defaulted loans. After that point, an agency is reimbursed for only 88 percent of the value of defaulted loans for the remainder of the fiscal year. If the claims exceed 9 percent, the reimbursement rate falls to 78 percent.

Raise the Lender Origination Fee. Raising the lender origination fee from 0.5 percent to 1 percent would reduce the federal costs of FFELP by a total of $525 million between 1997 and 2002. The rise in the origination fee might, however, reduce the number of lenders willing to participate in the program if some of them found that doing so was no longer profitable. Such a change might require that students spend more time finding a lender.

Lower the Default Reimbursement Rates. Lowering the default reimbursement rates to guaranty agencies by 3 percentage points (from 98 percent to 95 percent, for example) would reduce federal outlays for FFELP by $245 million over the next six years. Doing so might encourage guaranty agencies to be more diligent in ensuring that loans do not enter default. It would, however, increase the cost of the program to some agencies, which often have no choice in insuring loans that are at high risk of default.

Eliminate the Fee Paid to Loan Originators. Postsecondary schools that participate in the direct loan program receive a $10 fee for each borrower to help defray the cost of administering the program. In many cases, alternate originators, not schools, originate the loans and are paid a fee. Federal outlays could be reduced by an estimated $475 million over the 1997-2002 period if this fee was eliminated. Schools voluntarily participate in the direct loan program, and eliminating the payment would probably not cause many of them to return to FFELP. Faced with the loss of revenue, however, some schools might increase their tuition or reduce their services, having an unintended negative effect on students.

ENT-22 REDUCE STUDENT LOAN SPENDING BY INCLUDING HOME EQUITY IN THE DETERMINATION OF FINANCIAL NEED AND MODIFYING THE SIMPLIFIED NEEDS TEST

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Outlays	75	110	110	105	105	105	610

The Higher Education Amendments of 1992 eliminated house and farm assets from consideration in determining a family's ability to pay for postsecondary education, thereby making it easier for many students to obtain subsidized student loans. The legislation specifies formulas for calculating a family's need for subsidized loans. The amount a family is expected to contribute is determined by what is essentially a progressive tax formula. In effect, need analysis "taxes" family incomes and assets above amounts assumed to be required for a basic standard of living. The definition of assets excludes house and farm equity for all families, and all assets for applicants whose income is below $50,000.

Under this option, house and farm equity would be included in the calculation of a family's need for financial aid for postsecondary education. In addition, the income threshold under which most families are not asked to report their assets would be lowered to its previous level of $15,000. House and farm equity would be "taxed" at rates up to about 5.6 percent after a deduction for allowable assets.

Outlays could be reduced by about $610 million during the 1997-2002 period by including house and farm equity and modifying the simplified needs test. Associated savings could also be achieved in the Pell Grant program, a discretionary program that provides grants to low-income students. Outlays in that program could be reduced from the 1996 funding level adjusted for inflation by about $25 million in 1997.

Not counting home equity gives families who own a house an advantage over those who do not. There is concern, however, that because increases in incomes have not always kept pace with increases in housing prices, some families might have difficulty repaying their mortgage if they borrow against the equity in their house to finance their children's education. In addition, having to value their home and other assets would complicate the application process for many families.

ENT-23 INCREASE USER FEES ON PRODUCTS REGULATED BY THE FDA

	Annual Added Receipts (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Addition to Current-Law Receipts	91	95	98	102	106	110	602

Increasing the level of fees charged by the Food and Drug Administration (FDA) for new drug applications and establishing user fees for medical devices and other products regulated by the FDA could increase revenues by $91 million in 1997 and by $602 million through 2002. The FDA's regulatory activities are beneficial to both consumers and industry. The primary function of the agency is to ensure public safety by monitoring the quality of pharmaceutical products, medical devices, and food. Firms benefit from the public confidence that results from the FDA's quality standards. Ensuring a high level of product quality is essential to the success of those industries. Proponents of establishing new user fees argue that since firms benefit from those regulatory services, they should bear a share of the costs.

The Prescription Drug User Fee Act of 1992 established application fees and set a projected revenue schedule. The FDA charges a fee of $217,000 for each new drug application. Each supplemental application costs $108,000. In addition, pharmaceutical firms that have had a new drug application pending with the FDA at any time since September 1992 must pay an annual fee of $131,000 per manufacturing establishment and $13,000 per product on the market. In 1996, those fees are expected to raise $78 million, covering about 20 percent of the FDA's expenditures on regulating prescription drugs. The fees will increase slightly in 1997, when they are expected to raise $84 million. A 40 percent increase in the fee schedule above that specified by law would produce an additional $38 million in revenues in 1997 and $243 million between 1997 and 2002.

The Federal Food, Drug, and Cosmetic Act requires that firms register all new medical devices before they are marketed and obtain FDA approval for certain types of devices (class III). Currently, manufacturers of medical devices do not pay fees to the FDA. Legislation proposed in 1994 included submission fees for the approval and registration of new medical devices that would have raised $24 million, but the Congress did not pass it. Application fees of $60,000 for each new medical device would raise $5 million in 1997. Fees of $6,000 for new product registration would raise $27 million in 1997. Combined, those fees would cover about 20 percent of the costs of regulating the medical device industry. If the new fees were used to increase FDA expenditures, they would not reduce the deficit. Industry would be likely to agree to new application fees and fee increases if the raises were accompanied by promises to speed up the approval process, but that could increase FDA expenditures.

Finally, the food industry could be charged user fees that would raise $22 million in 1997, covering about 10 percent of the FDA's costs of regulating the industry. The agency inspects domestic food processors, analyzes more than 17,000 domestic food samples a year, and monitors the quality of seafood. If the FDA charged domestic food processors employing more than 250 people and processing all foods except meat and poultry an annual fee of $10,000, it could raise $12 million. If the Food and Drug Administration also charged each domestic establishment employing 100 to 249 people an annual fee of $5,000, it could raise another $10 million.

Charging user fees to all domestic food processors would be cumbersome. There are more than 15,000 domestic food processors who employ fewer than 100 people. Smaller establishments have a much lower sales volume and therefore should be charged a much lower annual fee. Collecting a low fee from so many establishments, however, might be counterproductive.

In general, people opposing FDA user fees might argue that the agency's current oversight activities are excessive. Rather than increasing user fees, the FDA could cut costs by scaling back its regulatory requirements.

ENT-24 REDUCE THE 50 PERCENT FLOOR ON THE FEDERAL SHARE OF AFDC, FOSTER CARE, AND ADOPTION ASSISTANCE PAYMENTS

Savings from Current-Law Spending	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
AFDC Outlays	400	400	410	420	440	450	2,520
Foster Care and Adoption Assistance Outlays	80	110	120	140	150	160	760
Offsets in the Food Stamp Program	-80	-80	-80	-80	-80	-80	-480
Total	400	430	450	480	510	530	2,800

The Aid to Families with Dependent Children (AFDC) program provides cash assistance to low-income families in which one parent is absent or incapacitated or in which the primary earner is unemployed. The Foster Care and Adoption Assistance programs provide benefits and services to children who are in need.

The federal government and the states jointly pay for the AFDC and Foster Care and Adoption Assistance programs. The federal share of the costs of the programs varies with a state's per capita income. High-income states pay for a larger share of benefits than do low-income states. By law, the federal share can be no less than 50 percent and no more than 83 percent. The 50 percent federal floor currently applies to 12 jurisdictions: Alaska, Connecticut, Delaware, the District of Columbia, Hawaii, Illinois, Maryland, Massachusetts, Nevada, New Hampshire, New Jersey, and New York.

Under this option, the 50 percent floor would be reduced to 45 percent, generating savings of about \$400 million in 1997 and \$2.8 billion through 2002. Outlays for AFDC would be reduced by \$400 million in 1997 and \$2.5 billion over the six-year period. Outlays for Foster Care and Adoption Assistance would decline by \$80 million in 1997 and \$760 million over the six-year period. The estimates assume, however, that states would partially offset their higher costs by reducing benefits. Lowering AFDC payments would make some families eligible for larger Food Stamp benefits. Under this assumption, then, outlays for the Food Stamp program would increase by \$80 million in 1997 and \$480 million over the six-year period.

Proponents of this change argue that high-income states that choose to be generous should bear a larger share of the cost. If the floor was reduced to 45 percent, federal contribution levels would be more directly related to the state's income, and eight of the 12 jurisdictions would still be paying less than the formula alone would require. In January 1996, seven of the 12 jurisdictions that would be affected by this proposal paid AFDC benefits that were at or above the median when states were ranked by size of benefits (for a three-person family). The higher benefit levels in those states mean that more families are eligible for AFDC.

Opponents of the change stress that the higher incomes and benefit levels in the affected states partly reflect higher costs of living. If this proposal was adopted, the affected states would have to compensate for the lost federal grants by reducing AFDC and Foster Care and Adoption Assistance benefits, lowering spending on other services, or raising taxes. If states chose to compensate by partially reducing benefits, as the estimates assume, program beneficiaries would be adversely affected.

ENT-25 REDUCE MATCHING RATES FOR ADMINISTRATIVE COSTS IN THE FOSTER CARE AND ADOPTION ASSISTANCE PROGRAMS

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Reduce Matching Rates to 50 Percent							
Budget Authority	90	95	105	110	120	130	650
Outlays	75	95	105	110	120	125	630
Reduce Matching Rates to 45 Percent							
Budget Authority	250	270	290	310	330	360	1,810
Outlays	210	270	290	310	330	350	1,760

The federal government pays one-half of most administrative costs for the Foster Care and Adoption Assistance programs; state and local governments pay the remaining share. Higher matching rates have been set for some types of expenses as an inducement for local administrators to undertake more of some activities than they would if those expenses were matched at 50 percent. For example, in Foster Care and Adoption Assistance, training costs are matched at 75 percent.

Reducing the higher matching rates to 50 percent would decrease federal outlays by $75 million in 1997 and by $630 million over the 1997-2002 period. Considerably greater savings would be generated if all the matching rates for administrative costs were reduced to 45 percent, because an additional 5 percent of the total administrative expenses would be shifted to the states. Federal outlays would fall by $210 million in 1997 and by $1.8 billion over the 1997-2002 period.

Reducing the higher matching rates to 50 percent would be appropriate if the need to provide special incentives for activities such as training no longer exists. Reducing all matching rates to 45 percent would give states stronger incentives to reduce administrative inefficiencies, because the states would be liable for a greater share of the associated cost.

States might respond to either option by reducing their administrative efforts, however, and might thereby raise program costs and offset some of the federal savings. Specifically, states might make less effort to eliminate waste and abuse in payments to providers. In addition, this proposal might harm recipients by encouraging states to lower benefits or limit services provided under these programs in order to hold down total costs.

ENT-26 ESTABLISH WORK REQUIREMENTS FOR FOOD STAMP RECIPIENTS

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Three-Month Work Requirement							
Budget Authority	180	750	830	870	910	950	4,490
Outlays	180	750	830	870	910	950	4,490
Six-Month Work Requirement							
Budget Authority	60	450	540	570	590	620	2,830
Outlays	60	450	540	570	590	620	2,830

The Food Stamp program provides subsidies for low-income households to enable them to purchase a nutritionally adequate diet. In 1995, about 27 million people lived in households that received food stamps each month. Altogether they received approximately $26 billion in benefits during the course of 1995. All types of households can receive food stamps if their income and resources are small enough. Recipients include families with and without children, young adults, the elderly, and the disabled.

This option, similar to provisions included in recent legislation passed by the Congress but vetoed by the President, would impose a work requirement on certain recipients in order for them to continue receiving food stamps past a certain period. Benefits for people 18 to 50 years old with no dependent children and who are not disabled or pregnant would be limited under this option to three or six months unless the recipients were either working or taking part in a job-training program for 20 hours per week. Participants could receive food stamps beyond that period if the labor market they lived in was experiencing an unemployment rate of 10 percent or higher, as provided in the Congressional legislation.

Imposing a work requirement on selected recipients who have received food stamps for three months would save an estimated $180 million in 1997 and a total of $4.5 billion over the 1997-2002 period. Imposing the work requirement after six months would save $60 million in 1997 and $2.8 billion over six years.

Advocates of establishing work requirements say that doing so would encourage recipients to find and keep employment. Some also believe that having a benefit program with no time limits, like the Food Stamp program, encourages some people to refuse certain jobs or not look for work in the first place. By allowing recipients to keep getting food stamps if the area they lived in had a high level of unemployment, this option would make some allowances for economic circumstances beyond recipients' control.

Opponents of adding a work requirement to the Food Stamp program argue that some people making an effort to find work may experience lengthy spells of involuntary unemployment, whether or not the economy is experiencing a severe downturn. In general, people receiving food stamps are less skilled than the average worker and have less work experience. Moreover, people with income low enough to qualify for food stamps sometimes live in areas that have fewer job opportunities and also may not have access to transportation that would take them to places of employment.

ENT-27 REDUCE FEDERAL EMPLOYEE RETIREMENT COSTS

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Defer COLAs for Retirees							
Military Retirement	270	670	1,080	1,480	1,890	2,300	7,700
Civilian Retirement	90	200	280	340	390	420	1,720
Limit Some COLAs Below Inflation							
Military Retirement	200	470	760	1,060	1,380	1,720	5,590
Civilian Retirement	150	360	570	800	1,030	1,280	4,190
Pay Full COLAs on Benefits Below a Certain Level and 50 Percent on Benefits Above That Level							
Military Retirement	170	420	680	950	1,120	1,370	4,710
Civilian Retirement	250	610	990	1,360	1,730	2,120	7,060
Modify the Pension Calculation							
Military Retirement	20	30	50	70	90	110	370
Civilian Retirement	10	50	100	150	210	270	790
Restrict the Agency Match on Thrift Savings Plan Contributions to 50 Percent							
Civilian Retirement[a]	360	530	590	670	750	850	3,750
Raise Employee Contributions							
Military Retirement[b]	10	70	110	140	180	220	730
Civilian Retirement[b]	790	1,870	2,170	2,230	2,270	2,340	11,670

a. Discretionary savings from the 1996 funding level adjusted for inflation.

b. Addition to current-law revenues.

Federal civilian and military retirement programs cover about 4.5 million government employees. Federal pension payments totaled $66 billion in 1995. Practically speaking, there are three basic approaches to reducing the costs of federal retirement--namely, cutting benefits earned by employees, increasing employee contributions, or cutting benefits that are paid to retirees.

The Federal Employees' Retirement System (FERS) covers civilian employees hired since January 1984. FERS supplements Social Security, in which workers who are covered under FERS also participate. When the system was created, workers hired before 1984 had the option to join. Most civilian employees not in FERS are covered by the Civil Service Retirement System (CSRS). Employees who are covered under CSRS do not ordinarily participate in Social Security. Uniformed military personnel are covered by the Military Retirement System (MRS), which was revised for personnel entering the service after July 31, 1986, and by Social Security.

The options described here for reducing the costs of federal retirement differ according to who would be affected. The increase in contributions, for example, would affect workers by requiring them to contribute more of their income toward future benefits. By contrast, the options limiting cost-of-living allowances (COLAs) would immediately affect current retirees. Under provisions of the Omnibus Budget Reconciliation Act of 1993 (OBRA-93) and subsequent revisions, COLA payments for civilian and military retirees were delayed for three months (until April 1996). The other options would affect current employees and future retirees.

It is noteworthy that the six-year cash estimates for the cuts in benefits described here represent only a small portion of the long-run savings that would result from reducing federal retirement costs. One reason is that the options are phased in at different rates, so the first year's cash savings are relatively small. Even more important, the cash flows and costs are accounted for differently in different options. For example, the bulk of the cash savings from modifying the salary used to compute pensions shows up years or decades in the future, when current employees retire. By contrast, the option of raising employee contributions counts as an immediate savings. Given those differences, the relative size of savings over six years for each option may not be an accurate guide to the long-run advantage of each for reducing the budget. Moreover, the emphasis on six-year cash estimates makes options such as increasing the federal retirement age less attractive than they would be otherwise. Such an option, which was considered by the Bipartisan Commission on Entitlement and Tax Reform, can have a large payoff in the longer run but not over the next six years.

The main argument for cutting federal retirement costs is that benefits are more generous than those typically offered by firms in the private sector. Reducing selected federal retirement benefits and increasing pay would produce a mix of current and deferred compensation that was more in line with standards in the private sector. Even if federal retirement was reduced in the manner described below, federal retirees would still receive benefits that exceed those typically afforded employees retiring from private firms. Depending upon how they are designed, some of the cuts in benefits could also promote efforts to reduce employment without layoffs because some workers would leave before reductions took effect. That would be especially true if employees were offered cash as an added inducement to resign. Cuts in retirement, moreover, probably hurt retention and recruitment less than salary cuts. Employees are likely to be more responsive to a salary cut that lowers their current standard of living than to a cut in the rate at which retirement benefits are earned that lowers their future standard of living.

The main argument against cutting retirement benefits is that such an action hurts both retirees and the government's ability to recruit a quality workforce. Advocates for federal workers and retirees point out that pensions are part of the employment contract between the government and its employees; attempts to cut retirement benefits therefore constitute reneging of earned benefits. They also argue that although certain provisions of retirement are generous, total compensation should be the basis of comparison between federal and private-sector employees. Annual surveys indicate that federal workers may be accepting salaries below private-sector rates for comparable jobs in exchange for better retirement benefits. In essence, those workers pay for their more generous retirement benefits by accepting lower wages during their working years. Moreover, as some observers maintain, cutting benefits that were promised to current annuitants may prompt forward-looking workers to demand higher pay now to offset the increased uncertainty of their deferred earnings.

One way to avoid some of the negative consequences of reductions in retirement benefits is to make such cuts apply only to new employees. Current employees could not argue that this prospective approach violates their labor contracts. The approach produces small savings in the short term but substantial savings in the future.

Options Offering Savings in the Near Term

Several of the options available for trimming federal retirement costs would produce savings in the near

term. Those options involve cutting cost-of-living adjustments for retirees, changing formulas upon which benefits are based, or increasing employee contributions.

Defer Cost-of-Living Adjustments

The CSRS and the prereform MRS (covering new recruits before August 1, 1986) provide full cost-of-living protection to all retirees, even those who retire before they are 62 years old. That kind of inflation protection is expensive when compared with what is available under the largest and most generous private pensions. Deferring COLAs until age 62 for all nondisabled employees who retired before that age would yield savings of $9.4 billion over six years. (Just over 80 percent of the estimated savings would derive from MRS because more than one-half of its annuitants are nondisabled retirees under 62, most of whom left the service in their 40s.) This COLA deferral would result in a loss of $11,900 over six years for a CSRS-covered annuitant retiring at 55 with an average annuity of $19,700 in 1997. The average military retiree under 62 years old would lose $12,000 over six years based on an average annuity of $19,800 in 1997.

If COLAs were deferred, the government's retirement costs would be moderated and more in line with the treatment of COLAs under FERS and the post-reform MRS. (Consistent with the MRS reforms, this option allows a catch-up adjustment at age 62 that reflects inflation after the date of retirement. Most retirees under FERS receive neither protection before age 62 nor a catch-up at 62.) Although the option would lower the compensation of affected workers after retirement, many retirees should be able to supplement their pensions by working--as most military retirees already do. Opponents note that this policy is especially hard on military retirees, who are generally forced to retire after 20 to 30 years of service. As an alternative to eliminating COLAs, retirees who have not reached the age of 62 could be granted COLAs equal to one-half of the inflation rate with no catch-up provision. That option would offer retirees under 62 some immediate insurance against inflation. The plan parallels changes that were mandated in 1982 but subsequently repealed and would result in savings of about $5.4 billion over six years.

Limit Some COLAs

On average, private pension plans offset only about 30 percent of the erosion of purchasing power caused by inflation. By contrast, CSRS and the prereform MRS provide 100 percent automatic protection from inflation; however, some of that protection was temporarily taken away by delayed effective dates under OBRA-93. The General Accounting Office calculated that COLA delays and reductions during the 10-year period from 1985 through 1994 effectively reduced COLAs to about 80 percent of inflation.

This option would limit COLAs to 1 percentage point below the rate of inflation for the old MRS and to one-half point below inflation for CSRS. (The smaller half-point limitation for CSRS would apply to a more comprehensive benefit that, unlike the defined benefits under FERS and MRS, substitutes for both Social Security and employer-sponsored benefits. Therefore, the smaller cut would produce a reduction comparable to the one-point limit for MRS enrollees.) Those changes would conform to the postretirement COLAs for employees covered by FERS and the revised MRS. This option, however, would hurt low-income retirees most. It would also renege on an understanding that workers in CSRS who passed up the chance to switch systems would retain their full protection against inflation. Savings would amount to $9.8 billion through 2002. (Savings from this option would decrease to $6.2 billion if it was coupled with the preceding one that would defer COLAs until age 62.) The average CSRS-covered retiree would lose $2,100 over six years, and the average military retiree would lose $4,200 over six years.

Reduce COLAs to Middle- and High-Income Retirees

Another alternative would tie the COLA reductions to beneficiaries' payment levels. The example discussed here would award the full COLA only on the

first $645 of a retiree's monthly payment and a half COLA on the remainder. The $645 per month threshold is about equal to the projected 1997 poverty level for an elderly person and would be indexed to maintain its value over time. Similar proposals have been considered for Social Security.

This approach would save about $420 million in 1997 and $11.8 billion over the 1997-2002 period. Both the average CSRS-covered retiree and the average military retiree would lose $3,400 over six years. Because the full COLA would be paid only to beneficiaries with low annuities, this option would better focus COLAs on retirees who have the greatest need for protection from inflation. Retirees receiving FERS benefits already receive a reduced COLA, so they would be less affected than those receiving CSRS benefits. Pension benefit levels are not always good indicators of total income, however, so the restricted COLAs will not always be focused on needy cases. Furthermore, many people object to any changes in earned retirement benefits that might be construed as introducing a means test for benefits, even if the test is limited only to the COLA. They also point out that federal pensions are fully taxable under the federal individual income tax in the same proportion that they exceed the contributions that employees made during their working years.

Modify the Salary Used to Set Pensions

Under current law, CSRS and FERS provide initial benefits based on an average of the employee's three highest-salaried years. MRS also uses that three-year base for personnel hired after September 1980; however, personnel hired before that date will receive benefits calculated using salary at the date of retirement. If, instead, a four-year average was adopted for CSRS and FERS, as well as for military personal hired after September 1980, and a 12-month average was adopted for the remaining military personnel, initial pensions would be about 2 percent to 3 percent smaller for most new civilian retirees and about 1 percent to 2 percent smaller for military retirees. Total savings to the government through 2002 would be $1.2 billion.

This option would align federal practice more closely with practice in the private sector, where five-year averages are common. In the long run, this option could encourage some employees to stay on another year in order to take full advantage, when calculating retirement benefits, of the higher salaries that may occur over time. That could help the government keep experienced people, but hinder efforts to reduce federal employment. Last year, the Congress actively considered the 12-month final pay option for military personnel, but it was ultimately rejected. About 250,000 personnel would have been affected.

Restrict Matching Contributions

The Thrift Savings Plan (TSP) is a defined contribution plan similar to 401(k) plans offered by private employers. On behalf of any worker covered by FERS, federal agencies automatically contribute 1 percent of individual earnings to the TSP. In addition, the employing agency matches voluntary employee deposits dollar for dollar for the first 3 percent of pay and 50 cents for each dollar for the next 2 percent of salary. The entire federal contribution for employees putting aside 5 percent amounts to a sum equal to 5 percent of pay. If the government limited its matching contributions to a uniform 50 percent rate against the first 5 percent of pay, the government's maximum contribution would fall to 3.5 percent of pay. Compared with current law, the discretionary savings from this proposal would total $3.8 billion over six years. (The estimates exclude savings realized by the Postal Service because it is now off-budget and reductions in its operating costs eventually benefit only mail users.) Assuming continuation of the automatic 1 percent match, this arrangement would remain superior to the coverage typically offered in the private sector.

Restricting the matching contributions would have several drawbacks. Middle- and upper-income employees rely on the government's matching contributions to maintain their standard of living during retirement, because Social Security replaces a smaller fraction of their income than it does for

lower-income employees. Part of the TSP's appeal derives from the fact that it provides individual accounts for each participant, the value of which cannot be eroded by subsequent changes in law. The security and portability of the TSP were a major reason for the decision of many employees to switch to FERS, because the TSP compensated for an inferior defined benefit plan. Changing the TSP's provisions would be especially unfair to that group, whose decision to switch plans reasonably assumed that changes would not be made. Opponents of restricting the matching rate also argue that doing so would diminish employees' savings for retirement, and that problem would be intensified if the cut reduced participation.

Increase Employee Contributions for Federal Pensions

As an alternative to cutting benefits, the government could increase its revenues by raising civilian and new military employees' contributions. The strength of the federal retirement system lies in the indexed benefits that provide inflation protection that cannot be purchased in the private sector. Requiring employees to contribute to their retirement funds--an uncommon practice in the private sector--is one way of offsetting this extra cost while maintaining a high level of salary replacement.

On the downside, for most federal civilian employees and new entrants to military service, the option would be equivalent to a 2 percent pay cut without a drop in taxes. It would increase the relative importance of deferred compensation, which some critics argue costs the government more than the value employees place on it. In addition, it would threaten the government's ability to recruit new workers and to retain experienced personnel. Finally, the option would further distance the federal government from common private-sector compensation practices. According to recent survey data, only about 13 percent of private pension plans require additional employee contributions. But private-sector employees contribute 6.2 percent of their pay (up to $62,700 in 1996) for Social Security.

Increasing Contributions from Civilian Employees. For civilian employees, this option would increase both CSRS- and FERS-covered employees' contribution rates by 1 percentage point in January 1997 and by another point a year later. It would generate revenue of about $11.7 billion through 2002. Currently, workers covered by CSRS contribute 7 percent of their salary to their retirement fund, but they pay no Social Security taxes. The 0.8 percent contribution rate for FERS-covered employees, together with their 6.2 percent share of the Social Security tax, was set to equal the employee contribution in CSRS.

An alternative to this option would be to restrict the increased employee contributions to CSRS-covered workers. That alternative would raise $4.8 billion in revenue over six years. Currently, the employee's 7 percent contribution and the employing agency's matching 7 percent contribution cover just 56 percent of the cost of CSRS pension benefits as earned. The Office of Personnel Management estimates that full funding of CSRS pension benefits would require contributions totaling 25.14 percent of payroll. Over time, the government makes additional payments that cover most of the remaining unfunded benefits. Raising the CSRS contribution rate to 9 percent over two years would lessen this "shortfall." Alternatively, the CSRS shortfall could be funded through higher agency contributions, although that would not reduce the long-term cost to taxpayers. Higher agency contributions would confront managers with the true cost of labor and could improve program management and resource allocation.

There is no funding shortfall for FERS participants. Restricting the higher contributions to CSRS-covered employees, however, would lower their take-home pay in relation to similarly situated FERS-covered employees, which would penalize workers who chose to stay in CSRS in 1987 rather than join the new FERS. More CSRS-covered employees would have switched to FERS when they had the opportunity if they had known that their contribution rate would be increased.

Increasing Contributions from Military Personnel. This option would also require people entering military service to contribute a portion of their basic pay toward their future retirement costs. Currently, military personnel do not contribute to their retirement, although they do pay Social Security. Entering service members would contribute 1 percent of their basic pay in January 1997, and that rate would rise by another percent a year later. Because military personnel who leave with less than 20 years' service time receive no pension, they would receive a refund of the full amount of their contributions with interest. Adopting this plan would save $10 million in 1997 and a total of $730 million through 2002. Because of future refunds, those amounts overstate the eventual savings by $320 million over the period. In 20 years, when the transition for this proposal was complete, annual savings would total nearly $800 million.

Military retirement benefits are significantly more generous than federal civilian retirement benefits. Requiring contributions by military personnel would be a step toward putting their system on an equal footing with its civilian counterpart. Proponents argue that equity is an important consideration--current and deferred compensation are important to recruiting and retaining civilian as well as military personnel--that has played a role in other actions such as advancing COLAs for military retirees to the same dates as COLAs for civilian retirees. Further, advocates contend that requiring new personnel to contribute 2 percent of basic pay would have slight impact on recruitment and retention. Reforms during the 1980s that cut military retirement benefits by 25 percent appear to have had only a negligible impact on meeting such goals, although their effect is difficult to assess because of other personnel policies that the military services have carried out in connection with the overall defense drawdown.

The military retirement system, however, is supposed to support a personnel system very different from those in civilian organizations. Although many military occupations at all levels closely resemble civilian jobs, the services assert a need for a "young and vigorous" force and thus support their retirement system that allows members to leave at still youthful ages after 20 years of service without imposing financial hardships. Further, the system encourages trained, skilled personnel who have 12 to 20 years of experience to remain in the service instead of seeking alternative employment. Opponents argue that the option would hurt retention by increasing the incentive for members to leave the military before they became eligible for retirement, especially because it offers an "exit bonus" in the form of the return of contributions. They contend that a direct pay cut, or a reduced pay raise in one year, could yield equal savings at lesser cost to retention. Critics of the option claim that offsetting its negative effects would require higher pay or larger reenlistment bonuses that could more than wipe out projected savings.

Options with Long-Term Impacts

The Congress has several additional options that could cut retirement spending in the long term but would not result in significant near-term cash savings. These options should be evaluated not only in terms of their savings but also in light of their effects on the ability of the government to recruit and retain a skilled workforce and on the credibility of the federal government as a reliable employer. In presenting these options, the Congressional Budget Office does not mean to suggest that any of the retirement programs face a financial crisis. In contrast to Social Security, the ratio of beneficiaries to the revenue base in those programs does not surge. In fact, the demand placed on the general fund by civil service retirees is expected to decline in constant dollar terms after 2015, according to the Office of Personnel Management's projections.

Raise the Retirement Age

The federal system generally permits retirement earlier than does the private sector. Most civilian federal employees can retire with immediate unreduced benefits at age 55 with 30 years of service, at 60 with 20 years of service and at 62 with five years of service. The minimum retirement age gradually rises to 57 for FERS employees born after 1969. As life expectancies have increased, Social Security and other retirement plans have raised retirement ages.

This option would gradually raise the normal retirement age for CSRS and FERS benefits from 55 to 57. Starting with employees who are currently 35 years old, the retirement age would increase by two months each year. Voluntarily retirement would still be allowed at age 55 with actuarially reduced benefits. For illustrative purposes, if the current retirement age were 57 instead of 55, about 15,000 employees each year would have to delay their retirement one to two years, thus saving about $600 million a year in 1997 dollars. Even greater savings would be realized if the retirement age was gradually increased to 60. Starting with employees under age 33, the retirement age for unreduced benefits would increase by four months each year until it reached 60.

The majority of federal employees would not be affected by this option. Recently, only 35 percent of the workforce voluntarily retired before age 60. Half of those retiring under normal retirement rules in 1993 were 62 or older. Nevertheless, raising the retirement age would still reduce federal retirement costs substantially. Most savings, however, would occur far beyond the five-year period identified in this option, because it would be necessary to phase in such a reform over several years.

Raising the retirement age, however, disrupts the long-term financial planning of employees, and is especially unfair to those near retirement already. In addition, the option would lengthen the service requirements for those employees who tend to have the longest federal service. Further, any tinkering with the retirement system may increase employees' uncertainty about the future of the system and weaken their attraction to government service.

Reduce the Rate at Which Benefits Are Earned

The rates at which benefits are earned, or accrued, determine the percentage of salary base--currently the three highest-paid years--that workers earn in pension benefits for each year of service. This option would reduce the accrual rates by 0.1 percentage point for each year of service after January 1, 2000. (If a worker valued retirement benefit accruals and wages equally, he or she would view the cut as similar to a reduction of $100 in pay for each $10,000 earned.) Thus, workers would see their replacement rate drop by 1 percentage point for each 10 years of service after 2000. For example, FERS employees who retired after 30 years of service would see the defined benefit portion of their pension fall by 10 percent--from 30 percent of final salary to 27 percent of salary.

Reducing the defined benefit portion of retirement lessens the extent to which retirement benefits bind the employee to federal service. Currently, workers who leave government service before normal retirement age effectively lose much of their expected pension wealth. This option would reduce that loss and thus probably lead to greater turnover among experienced and highly trained federal employees, who might find midcareer moves to the private sector more attractive.

Some people have also suggested that the rate at which military retirement benefits are earned after 20 years of service be reduced. One common proposal is to reduce the rate at which such benefits are earned from 3.5 percent a year to 2 percent a year. Benefits would still accrue at 2 percent of active-duty pay for the first 20 years of service. That reduction in earned benefits would reduce pensions from 75 percent of active-duty pay after 30 years of service to just 60 percent of pay, a 20 percent reduction. Only new personnel would be covered by the proposal.

That proposal, however, would greatly reduce the incentive to stay in the service past 20 years. In fact, the pension benefit formula was last reformed in 1986 with the express purpose of assisting retention beyond 20 years of service. Further, although 30-year retirees would still be receiving a pension that replaced 60 percent of active-duty pay, only 45 percent of regular compensation would be replaced. In addition to basic pay, regular military compensation includes housing and subsistence allowances.

Increase Reliance on the TSP

The Thrift Savings Plan has proven very popular with employees for several reasons. First, the benefits are portable. Vested individuals who switch jobs

suffer no loss of pension wealth. Second, the accounts are safe from political tampering. The Congress cannot reduce the benefits that have already been earned. Third, individuals who are willing to assume greater risks have the potential to earn much higher returns than are available from investments in Treasury securities. For example, last year the return on the government bond fund was 7 percent, but the passively managed stock-indexed fund earned 37 percent. Although those high returns in the stock fund are atypical--the 1994 return was just over 1 percent--and significant losses can occur if the market collapses, employees who invest in the stock fund can expect higher returns over time, based on past experience.

The experience to date with the TSP suggests that a possible win-win situation exists--savings for the government and higher valued retirement benefits for federal employees--if the government increases its reliance on the TSP. Because of the potential for higher returns on TSP investments and the plan's other positive attributes, the average employee might be better off if more of the government's resources were devoted to TSP contributions and less to defined benefits. For example, employees might find a $90 contribution to the TSP more attractive than $100 in defined benefit promises.

Although long-term savings might be realized, the short-term effects would be much higher cash outlays. The government's contributions to the TSP show up in the budget as cash outlays immediately, whereas the defined benefits that are earned by employees result in budget outlays only when they are paid out years later.

Increasing reliance on the TSP raises a number of additional issues. First, individuals bear the full investment risk in the Thrift Savings Plan, whereas they bear none under defined benefit plans. Second, TSP investments cannot offer the inflation-adjusted pension that CSRS and FERS benefits provide. Third, the government cannot as easily use the TSP to bind employees to the federal sector.

ENT-28 END OR SCALE BACK TRADE ADJUSTMENT ASSISTANCE

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
End Trade Adjustment Assistance							
Budget Authority	215	330	280	280	285	285	1,675
Outlays	145	300	295	285	285	285	1,595
Eliminate Trade Adjustment Assistance Cash Benefits							
Budget Authority	110	210	185	185	185	190	1,065
Outlays	110	210	185	185	185	190	1,065

The Trade Adjustment Assistance (TAA) program offers income-replacement benefits, training, and related services to workers unemployed as a result of import competition. To obtain assistance, such workers must petition the Secretary of Labor for certification and then meet other eligibility requirements. Cash benefits are available to certified workers receiving training, but only after their unemployment insurance benefits are exhausted.

Ending the TAA program would reduce federal outlays by $145 million in 1997 and by $1.6 billion during the 1997-2002 period. Affected workers could apply for benefits under title III of the Job Training Partnership Act (JTPA), which authorizes a broad range of employment and training services for displaced workers regardless of the cause of their job loss. Because funding for title III is limited, however, TAA cash benefits alone could be eliminated and the remaining TAA funds for training and related services could be shifted to title III. Savings under that option would total $1.1 billion during the 1997-2002 period.

The rationale for these options is to secure under federal programs more equivalent treatment of workers who are permanently displaced as a result of changing economic conditions. Since title III of JTPA provides cash benefits only under limited circumstances, workers who lose jobs because of foreign competition are now treated more generously than workers who are displaced for other reasons.

Eliminating TAA cash benefits would, however, cause economic hardship for some of the long-term unemployed who would have received them. In addition, TAA now compensates some of the workers adversely affected by changes in trade policy. Some people argue, therefore, that eliminating TAA benefits could lessen political support for free trade, which economists generally view as beneficial to the overall economy.

ENT-29 INCREASE TARGETING OF CHILD NUTRITION SUBSIDIES

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Change Subsidies in the School Lunch Program							
Budget Authority	65	400	450	475	500	525	2,415
Outlays	55	350	445	470	495	520	2,335
Reduce Subsidies to Family Day Care Homes							
Budget Authority	105	380	430	485	540	595	2,535
Outlays	90	340	425	475	530	585	2,445

Federal child nutrition programs were developed to improve the health and well-being of children by providing them with nutritious meals. The programs provide cash and commodity assistance to schools, child care centers, and family day care homes that serve meals to children.

Although most of the funds are earmarked for low-income children, some of the aid benefits middle- and upper-income children as well. In the National School Lunch Program (the largest of the child nutrition programs), most schools receive $1.80 in cash reimbursement for each meal served to children from families with an income at or below 130 percent of the poverty line; a smaller subsidy of $1.40 for each meal served to children from families with an income between 131 percent and 185 percent of poverty; and a subsidy of 17 cents a meal for children with a family income above 185 percent of poverty. Schools are also given 14 cents' worth of commodities for each lunch served, regardless of the family income of the child. Reimbursements to family day care homes, which do not vary with the family income of the child, are $1.54 for each lunch and lesser amounts for other meals.

Change Subsidies in the School Lunch Program. Under this option, cash and commodity subsidies for school lunches served to children whose family income is above 350 percent of the poverty level would be eliminated. At the same time, school lunch subsidies for children from families whose income ranges from 131 percent to 185 percent of the poverty level would be increased by 20 cents.

Together, those changes would reduce federal expenditures by $2.3 billion during the 1997-2002 period. Eliminating the cash and commodity subsidies for all lunches served to children from families with an income above 350 percent of the poverty line ($51,800 per year for a family of four in 1994) would reduce federal expenditures by $70 million in 1997, by $460 million in 1998, and by $3.0 billion during the 1997-2002 period. (Those estimates assume that the changes would be effective on July 1, 1997.) The higher subsidies called for in the second part of the option would increase federal expenditures by $700 million during the six-year period.

In these estimates, the Congressional Budget Office assumes that the reduction in federal subsidies would lead a small number of schools--those serving relatively few lunches to children from low-income families--to discontinue the program for all students. The savings resulting from schools' dropping out of the program are an estimated $325 million over six years.

Although most of the federal funds are earmarked for low-income children, about one-fifth of the children who participate in the school lunch program have family income above 350 percent of the poverty line. Those children are less in need of federal subsidies, and the targeting of this assistance

would be improved by limiting it to children from families with the lower income. Increases in the subsidies for meals served to children in families with an income from 131 percent to 185 percent of the poverty level would, in effect, redistribute some of the child nutrition subsidies from higher-income students to that group.

Such changes would probably result in lower participation among children who are not poor because participation falls when prices rise. Participating schools would probably increase the price charged to children who are not poor to make up the loss in reimbursements unless state and local governments provided additional support. Children who dropped out of the program could receive meals of lower quality, since the meals qualifying for reimbursement are nutritionally adequate, whereas those from alternative sources might not be. Moreover, if the decline in participation was substantial, low-income children could become the main recipients of the meals and thus could be identified as poor by their peers. Finally, a few schools in which children who are not poor provide a large share of the total revenue for the meal program would probably drop out when participation fell, thereby eliminating federally subsidized meals for the low-income children attending them.

Reduce Subsidies to Family Day Care Homes. This option would lower subsidies for some meals served in family day care homes, effective July 1, 1997, by the same amounts as those proposed last year in the Personal Responsibility and Work Opportunity Act of 1995 (H.R. 4). For homes located in low-income areas or homes run by providers with income below 185 percent of poverty, subsidies would remain unchanged from their level under current law. At the option of the provider, subsidies at the current level could also be retained for any children from families with an income below 185 percent of poverty. In other homes or for other children, the subsidies would be reduced by about 40 cents for snacks, 60 cents for breakfasts, and 70 cents for lunches. This option would lower federal expenditures by $2.4 billion during the 1997-2002 period.

This option would also improve the targeting of federal aid. About three-quarters of the children cared for in family day care homes have family income above 185 percent of the poverty line and are less in need of government subsidies than are lower-income children. In the face of reduced subsidies, however, some providers would lower the quality of meals served to children in their care, raise costs of care to parents, or even cease to do business. In the last case, the supply of child care would fall. Moreover, because the increased payment for administrative costs would apply only to homes in low-income areas, other providers--or their sponsoring organizations--would incur additional administrative costs if they wanted to keep the higher subsidies.

ENT-30 ELIMINATE SMALL FOOD STAMP BENEFITS

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	55	65	65	65	70	70	390
Outlays	55	65	65	65	70	70	390

The Food Stamp program provides coupons that enable low-income householders to buy a low-cost but nutritionally adequate diet. Among all programs providing assistance to low-income people, its reach is the greatest, encompassing all types of households, from the elderly living alone to two-parent families with children.

Because the benefits to which a household is entitled decline as its income rises, some households can receive only small amounts of food coupons each month. For one- and two-person households, a special rule increases the food coupons they receive to $10 a month currently and to $15 a month beginning in 1998, according to Congressional Budget Office estimates, even if their net income indicates a smaller coupon amount. (The jump in 1998 reflects indexing of the minimum benefit coupled with rounding to the nearest $5.)

This option would eliminate the special rule that ensures a $10 or $15 minimum benefit for eligible households with one or two people and would also eliminate food stamp benefits of less than $10 a month for all households, thereby reducing federal expenditures by $55 million in 1997 and by $390 million during the 1997-2002 period. The savings include an estimated $9 million a year from lower administrative costs. Approximately 440,000 households, three-fifths of which are composed of elderly people, would lose their food stamp benefits entirely. Another 150,000 would receive reduced benefits in 1998 and beyond.

Carrying out this option would make administering the Food Stamp program more cost-effective because a large number of households that receive small monthly benefits would no longer have to be served. It would also eliminate the special treatment of one- and two-person households. Finally, such a change would foster consistency between the Food Stamp program and the Aid to Families with Dependent Children program, which does not pay benefits of less than $10 a month.

At the same time, this option would reduce by as much as $120 a year the effective incomes of households in which incomes are already low. Even though the households that would be affected are those with the highest incomes among food stamp recipients, their incomes are usually close to the poverty threshold.

ENT-31 REDUCE THE $20 EXCLUSION FROM INCOME IN SUPPLEMENTAL SECURITY INCOME

Savings from Current-Law Spending	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	115	160	165	185	160	180	965
Outlays	115	160	165	185	160	180	965

The Supplemental Security Income (SSI) program provides federally funded monthly cash payments--based on uniform, nationwide eligibility rules--to needy aged, blind, or severely disabled people. In addition, all but eight states and jurisdictions provide supplemental payments. Because SSI is a means-tested program, its benefits are reduced by recipients' outside income, subject to certain exclusions. For unearned income--most of which is Social Security--the first $20 a month is excluded and any additional amounts reduce benefits dollar for dollar. Earned income is excluded more liberally, and any of the $20 exclusion that is not applied to unearned income is applied to earned income.

Reducing the monthly $20 exclusion to $15 would save $115 million in 1997 and almost $1 billion over the 1997-2002 period. A program that ensures a minimum living standard for its recipients need not provide a higher standard for people who happen to have unearned income, as illustrated by the absence of any standard exclusion for unearned income (other than child support) in the Aid to Families with Dependent Children program.

Nevertheless, reducing the monthly $20 exclusion by $5 would decrease by as much as $60 a year the incomes of the roughly 2.6 million low-income people--approximately 40 percent of all federal SSI recipients--who will benefit from the exclusion in 1997. Even with the full $20 exclusion, incomes of most SSI recipients fall below the poverty threshold.

ENT-32 ELIMINATE INDIVIDUAL FUNCTIONAL ASSESSMENTS AS A MEANS FOR CHILDREN TO QUALIFY FOR SUPPLEMENTAL SECURITY INCOME

Savings from Current-Law Spending	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	85	930	1,265	1,540	1,395	1,695	6,910
Outlays	85	930	1,265	1,540	1,395	1,695	6,910

The Supplemental Security Income (SSI) program, administered by the Social Security Administration (SSA), provides cash benefits to elderly and disabled people with low income and qualifies them for Medicaid coverage. Children can receive SSI benefits if their disability is on SSA's list of qualifying conditions, known as the medical listings, or if they can demonstrate a substantial reduction in their ability to function in a manner appropriate to their age, based on the individualized functional assessment (IFA) developed by SSA.

The SSA established the assessment in response to the Supreme Court's 1990 decision in *Sullivan v. Zebley* in which it mandated that the process for determining disability in children be analogous to the process for adults because the legislation establishing the program did not differentiate between the eligibility requirements for children and adults. Adults can qualify either because they have a condition covered by the medical listings or because their residual functional capacity to undertake activities of daily living makes them incapable of sustained work. Before the *Zebley* decision children could only qualify for benefits if they had a condition in the medical listings. The IFA for children was designed to mirror the assessment of residual functional capacity for adults.

The use of the IFA has contributed significantly to the growth in the number of children, especially those with mental disabilities, receiving benefits. Nearly 1 million children received SSI benefits in 1995, compared with just under 300,000 in 1989, the year before the *Zebley* decision. According to the General Accounting Office, more than 40 percent of the growth from 1989 to 1993 occurred in cases achieving eligibility through IFAs.

This option, which both the Congress and the President included in recent legislative proposals, would establish separate criteria for the eligibility of children for SSI benefits. Children would be eligible for benefits in the future only on the basis of the medical listings--either matching a condition on the medical listing or having a condition with an equal level of severity. The IFA would be eliminated. This option would reduce the number of children receiving benefits, leading to savings of $85 million in 1997. Total savings over the 1997-2002 period would be about $6.9 billion.

Proponents of this option want to eliminate the IFA because it allows children who do not have any major functional limitations to qualify for benefits. That can occur because the criteria of the IFAs allow children to receive benefits if they have several moderate disabilities within a given "functional domain." Moreover, proponents of this option claim that identifying the presence of moderate disabilities involves much more subjectivity than diagnosing severe disabilities.

Defenders of the IFA procedure argue that relying solely on the medical listings would exclude deserving children. In addition, a combination of moderate factors may result in a profound functional limitation--which, advocates claim, is especially true for children who have mental disabilities or behavioral problems.

ENT-33 CREATE A SLIDING SCALE FOR CHILDREN'S SSI BENEFITS BASED ON THE NUMBER OF RECIPIENTS IN A FAMILY

Savings from Current-Law Spending	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	0	75	100	115	110	125	525
Outlays	0	75	100	115	110	125	525

The Supplemental Security Income (SSI) program, administered by the Social Security Administration (SSA), provides cash benefits to elderly and disabled people with low income and qualifies them for Medicaid coverage. In addition, most states provide supplemental payments to SSI recipients. In recent years, the number of disabled children receiving SSI benefits has grown sharply, from almost 300,000 in 1989 to nearly 1 million in 1995. Children received almost $5 billion in federal SSI benefits in 1995, accounting for about 23 percent of federal SSI benefits paid that year to disabled recipients.

The rising participation of children in the SSI program for the disabled stems in part from the Supreme Court's decision in *Sullivan v. Zebley* in 1990. That case broadened the eligibility rules for disabled children and led to a significant effort by SSA to inform possible beneficiaries of their potential eligibility for the program.

Unlike in other means-tested programs, the amount of SSI benefits that a family receives for each additional member who qualifies does not decline as more family members participate in the program. For example, a family with one child qualifying for SSI benefits could have received up to $470 a month in 1996, or more than $5,600 a year, if the family's income (not including the SSI benefits received) was under the cap entitling them to the maximum benefit. If the family had a second child qualifying for benefits, it could have received an additional $470 a month for that child. The amount of benefits children receive is based only on the presence of a disability and the family's resources, not on the nature or severity of the qualifying disability.

This option would create a sliding scale for SSI disability benefits, so that a family would receive lower benefits per child as the number of children in the family qualifying for benefits increased. The sliding scale used for this option was recommended by the National Commission on Childhood Disability in 1995. It would keep the maximum benefit for one child receiving benefits as it is in current law, but further benefits would be reduced for each additional child in the family participating in the program. For example, if such a sliding scale were in place in 1996, the first child in a family qualifying for the maximum benefit would receive $470. The second child in such a family would receive $294, and the third would receive $250. Benefits would continue to decrease for additional children, but very few families have more than three children receiving SSI benefits. As with current SSI benefits, the sliding scale would be adjusted each year on the basis of the consumer price index.

Altering the structure of SSI benefits in that manner would save $75 million in 1998. Over the 1998-2002 period it would save a total of $525 million.

Proponents of this option note that benefits awarded according to the proposed gradation take into account the economies of scale that are involved in raising more than one child. Since the amount of benefits that children obtain is not related to the severity of the disability, proponents argue that the benefits a family with several disabled children receive are greater than what is needed. The extra medical costs that disabled children might incur, which are not subject to economies of scale, would

be covered by Medicaid as they are under current law.

Opponents of this measure argue that children with disabilities sometimes have additional expenses unique to their particular problems that may not be affected by economies of scale. Some of those costs are associated with various forms of therapy, modifications to housing facilities, and specialized equipment. If those additional costs were not covered by Medicaid, reducing cash benefits might adversely affect such families in a way that would not exist if the SSI program continued to use its current income test.

ENT-34 RESTRICT LEGAL IMMIGRANTS' ELIGIBILITY FOR WELFARE PROGRAMS

Savings from Current-Law Spending	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Eliminate Eligibility for Most Aliens							
SSI	275	2,075	2,600	2,775	2,425	2,700	12,850
Medicaid	100	625	925	1,150	1,400	1,700	5,900
Food Stamps	30	560	670	640	620	610	3,130
AFDC	20	40	60	85	110	115	430
Total	425	3,300	4,255	4,650	4,555	5,125	22,310
Extend Deeming Period Until Citizenship							
SSI	160	430	660	930	940	1,180	4,300
Medicaid[a]	5	15	25	35	40	50	170
Food Stamps	30	65	75	90	95	105	460
AFDC	10	20	25	25	30	30	140
Total	205	530	785	1,080	1,105	1,365	5,070
Extend Deeming Period to Five Years							
SSI	80	230	310	340	300	340	1,600
Medicaid[a]	5	10	10	15	15	15	70
Food Stamps	10	30	40	45	45	45	215
AFDC	10	15	15	20	20	20	100
Total	105	285	375	420	380	420	1,985

a. Medicaid does not now use deeming and would not under these options. Nevertheless, the Congressional Budget Office assumes that a small proportion of people who would be eligible for Medicaid would simply fail to enroll if they were deemed off the SSI or AFDC program.

Legal immigrants who have not become U.S. citizens are eligible for benefits from the Supplemental Security Income (SSI), Aid to Families with Dependent Children (AFDC), Food Stamp, and Medicaid programs if they meet the regular requirements for those programs. Illegal aliens are eligible only for emergency Medicaid assistance.

Legal immigrants, however, are subject to a requirement that does not apply to citizens. Immigrants who have sponsors must include a portion of their sponsor's income when the means test for eligibility is applied. In other words, some of the sponsor's income is "deemed" to the immigrant. The deeming process makes some immigrants ineligible for benefits they could otherwise receive.

The deeming period for AFDC and Food Stamps is three years. The deeming period for SSI was temporarily raised to five years, but in October 1996 it will revert to three years. Furthermore, deeming for SSI does not apply if an immigrant becomes disabled after entering the country. There is no deeming requirement specific to aliens for Medicaid.

Of the three options considered here, eliminating the eligibility of most aliens for SSI and the Food Stamp program, along the lines of the welfare reform

bill passed by the Congress in December 1995, would provide the greatest savings over the next six years--$22.3 billion. Substantial savings would also be realized in Medicaid (which is closely linked to the SSI program), and smaller savings would occur in the AFDC program. That bill would exempt certain groups of aliens--chiefly, refugees who have been in the United States for less than five years and legal aliens who have amassed 40 quarters of employment in the United States--from the cutoff. A grace period would allow aliens who were already receiving benefits to continue receiving them for one more year. Emergency Medicaid benefits would continue to be available to aliens. The bulk of savings would come from SSI and from the regular (nonemergency) Medicaid program. When estimating savings, the Congressional Budget Office (CBO) takes into account a potential increase in the rate at which immigrants would become citizens in order to obtain benefits.

Another option would be to continue deeming for immigrants until they were naturalized. Immigrants generally are not permitted to become citizens until five years after they enter the United States, and many are never naturalized at all. This option--which appeared in President Clinton's budget proposals for fiscal year 1997--would apply to future applicants for SSI, Food Stamp, and AFDC benefits. The President proposes several exemptions, chiefly for immigrants who are more than 75 years old or have worked in the United States for more than 20 quarters. Again, some Medicaid savings would occur because of that program's links to the SSI and AFDC programs. The option would save $5.1 billion over the 1997-2002 period. As under the previous option, CBO assumes that some immigrants would be spurred to become citizens if the plan was adopted.

The option that would offer the least savings over six years--$2.0 billion--would permanently extend the deeming period to five years for all four programs. Since most legal immigrants cannot become citizens until five years after they enter the country, changes in naturalization rates would not affect this estimate.

There are several arguments, aside from savings, in favor of these options. First, some supporters of these measures question immigrants' commitment to the United States if they do not become citizens, and thus contend that they are not entitled to assistance. Second, these options would promote more responsibility among immigrants' sponsors. Third, restricting public assistance might speed immigrants' integration into the American economy and culture. Finally, some people worry that allowing immigrants to collect welfare benefits encourages an influx of people with few skills who may compete for jobs with low-skilled citizens.

There are several arguments for not adopting these options. Legal immigrants enter the country with government permission, many pay taxes, and some can be called to serve in the armed forces. Therefore, opponents of these restrictions argue, legal immigrants who are needy also deserve welfare benefits. Second, removing benefits would lower the living standards of vulnerable immigrants, including children, the elderly, and the disabled, many of whom eventually become citizens. Finally, since it is unconstitutional for states to use immigrant status in determining eligibility for state-run programs, adopting these measures would probably increase the cost of states' programs providing general assistance.

ENT-35 LIMIT SPENDING IN THE EMERGENCY ASSISTANCE PROGRAM

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	555	780	915	985	1,060	1,115	5,410
Outlays	555	780	915	985	1,060	1,115	5,410

The Emergency Assistance (EA) program allows states to provide short-term aid to needy families with children in order to "avoid destitution" of the children or to provide living arrangements for them. As authorized under title IV-A of the Social Security Act, funding is shared equally by federal and state governments.

At the beginning of fiscal year 1991, 29 states had EA programs, which focused on assistance after natural disasters or crises threatening family living arrangements. During the late 1980s and early 1990s, federal spending on EA programs ranged from about $125 million to $175 million a year. Now, however, all but two states have emergency assistance programs and many states have expanded assistance into new service areas, such as emergency foster care or family preservation activities that might diminish the need for foster care. As a result, federal spending jumped sharply to $940 million in 1995 and is expected to reach more than $2 billion in 2002 under current law.

This option would limit federal EA spending to $1 billion a year. That amount falls between spending levels before the upsurge and estimated spending for the current fiscal year. Limiting EA spending would save an estimated $555 million in 1997 and $5.4 billion during the 1997-2002 period. The limit could be accomplished either by setting a program cap or by converting the program to a block grant. Funds could be distributed among states in proportion to current spending, or a different mechanism could be used so that states that have not already increased their spending would not be placed at a disadvantage.

Much of the increased EA spending appears to represent a shifting of state spending to the federal government, rather than an increase in services to needy families. In addition, a new Family Preservation and Support Services program, enacted in the Omnibus Budget Reconciliation Act of 1993, entitles states to $930 million in federal funds during the 1994-1998 period to meet some of the same needs of children that the EA expansions cover. Nonetheless, under this option many states would receive less funding than they have in the recent past. Moreover, if states did not offset reduced federal funds, some of the most vulnerable children--for example, victims of abuse--could be hurt. Also, if family preservation services are successful in avoiding placement of children in foster care (and good information on whether there is such a relationship is not available), any reduction in EA funding could increase federal spending on foster care.

ENT-36 ELIMINATE THE $50 CHILD SUPPORT PAYMENT TO AFDC FAMILIES

Savings from Current-Law Spending	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	120	130	140	160	170	190	910
Outlays	120	130	140	160	170	190	910

The Child Support Enforcement program collects child support payments from noncustodial parents on behalf of families receiving Aid to Families with Dependent Children (AFDC). Those payments are largely used to offset federal and state costs for AFDC. Amounts up to the first $50 in monthly child support collected, however, are paid to the AFDC family, without affecting the level of AFDC benefits. In essence, that policy means that AFDC families for whom noncustodial parents contribute child support get as much as $50 more a month than do otherwise identical families for whom such contributions are not made.

Eliminating the $50 child support payment to AFDC families would save the federal government $120 million in 1997 and $910 million through 2002. Stopping such payments would end the differential treatment of AFDC families that depends on whether the noncustodial parent pays child support. Administrative complexity would also be reduced.

Nevertheless, the child support payment provides an incentive for custodial parents to make an effort to obtain support. If the payment was eliminated, recipients of AFDC would be no better off when noncustodial parents paid child support than when they did not, perhaps reducing recipients' cooperation in seeking such payments. Noncustodial parents also might reduce their child support payments if this option was enacted, although new enforcement tools such as the withholding of wages might make it difficult for many to do so. In either case, the well-being of the children in families receiving AFDC would be adversely affected.

ENT-37 REPLACE FEDERAL PROGRAMS ASSISTING NEEDY FAMILIES WITH BLOCK GRANTS TO THE STATES

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Block Grants at 1995 Levels of State Spending							
75 Percent Maintenance of Effort							
Family support payments[a]	-200	415	935	1,425	1,940	2,460	6,975
Food Stamps	-45	-90	-185	-410	-535	-670	-1,935
100 Percent Maintenance of Effort							
Family support payments[a]	-200	415	935	1,425	1,940	2,460	6,975
Food Stamps	0	-35	-125	-335	-460	-590	-1,545
Block Grants at Average of 1993-1995 Levels of State Spending							
75 Percent Maintenance of Effort							
Family support payments[a]	640	1,265	1,790	2,280	2,790	3,310	12,075
Food Stamps	-110	-190	-285	-530	-655	-785	-2,555
100 Percent Maintenance of Effort							
Family support payments[a]	640	1,265	1,790	2,280	2,790	3,310	12,075
Food Stamps	-75	-155	-240	-450	-580	-710	-2,210

a. Spending in place of current AFDC, JOBS, EA, and related child care programs.

The federal government, in conjunction with the states, provides several programs for financially needy families. The programs, including Aid to Families with Dependent Children (AFDC), Job Opportunities and Basic Skills (JOBS), Emergency Assistance (EA), and related child care programs (At-Risk, transitional, and AFDC child care), are administered by the states subject to federal laws and regulations. The federal government, through matching funds, pays more than one-half of the expenses of those programs. States, however, set their own benefit levels and eligibility criteria subject to federal limitations. Therefore, total federal spending is in large part a result of decisions made by state governments.

In 1995, the federal government spent more than $12 billion on AFDC benefits and an additional $2 billion on AFDC administration. Federal expenditures on child care programs associated with AFDC amounted to more than $1 billion, and EA and the JOBS program cost about $950 million each. Thus, those programs and related expenses totaled about $17 billion.

The option considered here--similar to provisions contained in recent legislation (H.R. 4) passed by the Congress but vetoed by the President and the plan put forward by the National Governors' Association (NGA)--would end the specific entitlement provided

by the federal government to AFDC, JOBS, EA, and related child care by replacing those programs with a block grant to the states. States would be required to spend funds from their block grants on needy families with children, and each state would design its own programs subject to some federal constraints. For example, the federal government would give money to a state on condition that the latter spend on its welfare programs a minimum proportion (75 or 100 percent) of its previous spending on AFDC and related programs. If a state spent below that threshold, the federal government would reduce its block grant the following year by the amount that the state underspent.

Federal spending for these welfare programs would no longer be determined by an open-ended entitlement based on states' benefit levels, eligibility criteria, and changes in the economic conditions of potential recipients. Instead, the Congress would control spending by annual budgetary legislation. In the past, as the number of recipients in AFDC and related programs increased, or as states raised their benefit levels, federal spending has grown accordingly. From 1990 to 1995, in fact, federal expenditures on AFDC benefits increased about 20 percent, from more than $10 billion to slightly more than $12 billion (somewhat faster than growth in the consumer price index). Although states would no longer receive automatic increases in federal assistance if caseloads grew, many governors believe states would save money because their increased control over their welfare programs would enable them to reduce people's dependence on welfare.

There are at least two methods of setting the size of a state's block grant. The first provides each state with funds equal to the amount it spent in 1995 on the programs being replaced by the grant. The second allows each state to receive the average level of its yearly spending on such programs during the 1993-1995 period. In addition, block grants could be fashioned to include increased amounts based on population growth.

If the states' initial grants were equal to the level of AFDC spending in 1995 and state spending was required to be 75 percent of its previous level, savings would total about $5 billion during the 1997-2002 period. If the grants were equal to the average level of spending for each state during the 1993-1995 period, the federal savings would be about $9.5 billion between 1997 and 2002. Federal savings would be higher if states were required to spend at least 100 percent of their previous spending. The higher savings would come from lower federal payments for Food Stamps. With a 100 percent maintenance of effort on the part of the states, cash benefits to needy families would be higher, and households would qualify for fewer Food Stamp benefits. Over the 1997-2002 period, those additional savings would amount to about $400 million, with most occurring after 2000.

Supporters of block grants argue that freeing states from federal regulations would give them the flexibility to tailor their programs to their particular populations and economies. Administrators could also coordinate service delivery better among multiple programs and between state and local governments. Furthermore, state-based programs would give those who are actually delivering services to families sole responsibility for achieving positive outcomes. Many governors believe that would increase their ability to move people off the welfare rolls and reduce the administrative burden of providing benefits. Moreover, allowing states the freedom to experiment with different types of programs could provide information on the effectiveness of various approaches to welfare reform.

Opponents of this option fear that fiscal pressures on states during an economic downturn or recession might lead them to cut back their support of needy families without a penalty. Under the present system, a reduction in state welfare spending automatically brings about a reduction in federal spending in that state; that would not be true under a block grant, thus increasing the incentive to reduce state spending. At the same time, federal support might decline under the block grant structure since the programs might be considered less of a federal responsibility. Furthermore, the current system already allows for substantial flexibility. States wishing to experiment with modifications to those programs can apply to the Department of Health and Human Services for a waiver. Since 1990, about 40 states have received waivers for one or more AFDC rules, although state administrators have complained that the process for obtaining waivers is slow and cumbersome.

One suggestion for dealing with the fiscal pressures that a state might face during an economic downturn is to establish a contingency fund, as in both H.R. 4 and the NGA proposal. If a state experienced a recession, for example, it could receive additional funds to help cover the higher costs that an economic downturn would entail. The ability to qualify for additional funds in that way could help preserve the minimum level of assistance offered under the current entitlement programs. A contingency fund, however, would raise the expense of this option. Moreover, opponents of the option question the appropriateness and accuracy of state-level economic indicators that could be used to trigger payments from the contingency fund.

Another concern of opponents of replacing current programs with block grants is that states might engage in a "race to the bottom." Since federal funds going to a state would no longer automatically increase with each new recipient (or decrease with each fewer recipient), the additional cost to a state of each program participant would be higher. Thus, states would have more of an incentive to discourage new recipients and encourage their present recipients to leave the state. Opponents fear this dynamic might ultimately drive the level of benefits that welfare participants receive significantly below its current level.

ENT-38 REDUCE THE FEDERAL MATCHING RATE AND INCREASE FEES IN THE CHILD SUPPORT ENFORCEMENT PROGRAM

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Reduce the Federal Matching Rate							
Budget Authority	690	740	810	890	970	1,050	5,150
Outlays	690	740	810	890	970	1,050	5,150
Charge Fees for Services							
Budget Authority	300	330	360	390	420	450	2,250
Outlays	300	330	360	390	420	450	2,250

NOTE: These estimates do not take into consideration the interaction between the two options, which is noted in the discussion.

Enacted in 1975, the Child Support Enforcement (CSE) program provides administrative tools and funding that states can use to improve the payment of child support by absent parents. The federal government helps states finance their CSE efforts by paying 66 percent of the costs and making incentive payments. As a result of that federal funding and because states keep a portion of child support collections, they saved $450 million in 1994. By contrast, the federal government incurred costs of about $945 million in 1994, after accounting for the share of child support collections that is allotted for reducing welfare payments.

Reduce the Federal Matching Rate. The Congressional Budget Office (CBO) estimates that lowering the federal matching rate from 66 percent to 50 percent in 1997 and subsequent years would save $690 million in 1997 and $5.2 billion through 2002, although the amount of savings could vary, depending on how states reacted to the change. Under CBO's assumptions, states would experience net costs in 1997 and thereafter.

Reducing the federal share of CSE costs would alter the balance of costs and savings between the federal and state governments, decreasing both federal costs and state savings. Although a higher matching rate may have been needed in the past to induce states to set up CSE programs, such programs are now operating and cannot be dismantled without financial penalty. Also, this option would encourage states to improve the efficiency of their CSE efforts, since they would pay a larger share of the costs of inefficiencies, and could thus produce even lower program costs.

Lowering the matching rate would entail some risks, however. Because caseloads for child support workers are already high, it is unlikely that states could improve efficiency enough to offset the reduction in federal payments. Thus, they might cut CSE services, thereby reducing child support collections. The lower CSE collections for families receiving payments under the Aid to Families with Dependent Children (AFDC) program would decrease state revenues from that source, but some states still might be better off financially if they cut CSE services, because states with low income may receive only a small share--as low as 22 percent--of child support collected. Further, states receive only small financial benefits from child support collections for non-AFDC families. They might, therefore, be even more likely to cut back on efforts for those families, thereby lowering the children's living standards.

Charge Fees to Some Families. Although states are required to charge application fees for furnishing

child support services to non-AFDC families, many states charge only nominal amounts. In 1995, child support enforcement agencies collected fees of about $35 million, or less than 2 percent of total program costs. This option would require states to charge non-AFDC families a fee of $25 at the time they applied for services and a fee equal to 5 percent of any child support collected for them. Some flexibility could be given to states by allowing them to charge the annual user fee to either the custodial or the absent parent, to exempt low-income families but charge more to higher-income families, or to pay the fee directly to the federal government without charging families.

By charging these fees, the federal government would save $300 million in 1997 and $2.2 billion through 2002, at the current 66 percent federal matching rate. With a matching rate of 50 percent, as discussed above, savings would decline to $230 million in 1997 and $1.7 billion through 2002. If fees were set to recover all costs for non-AFDC families in the CSE program, they would have to equal about 15 percent of collections for those families.

In view of the substantial services that many families receive from the CSE agencies, these fees would be a modest contribution toward meeting their costs. Charging fees could discourage some custodial parents from seeking assistance, however, potentially reducing collections of child support. For some families, the fees would be much higher than the cost of the services provided. The families most likely to be discouraged would probably be those most in need of the income, unless states chose to exempt low-income families from paying the fees. In addition, with immediate wage withholding for most new or modified child support orders in place and operating through CSE agencies, some families who did not want--or need--the CSE services would nonetheless have to pay the collection fee.

ENT-39 REDUCE THE REPLACEMENT RATE WITHIN EACH BRACKET OF THE SOCIAL SECURITY BENEFIT FORMULA

Savings from Current-Law Spending	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Outlays	170	670	1,420	2,340	3,190	4,040	11,830

Under current law, the basic Social Security benefit is determined by a formula that provides workers with 90 percent of their average indexed monthly earnings (AIME) up to the first bend point (which defines the first earnings bracket), plus 32 percent of the AIME in the second bracket, plus 15 percent of the AIME above the second bend point. One method of reducing initial Social Security benefits would be to lower those three rates by a uniform percentage. (A related option for achieving long-term savings is discussed in Chapter 7.)

Lowering the three rates in the benefit formula from 90, 32, and 15 percent to 87.3, 31.0, and 14.6 percent, respectively, would achieve an essentially uniform 3 percent reduction in the benefits of newly eligible workers starting in 1997. Thus, a 62-year-old retiree who has always earned the average wage would receive initial benefits in 1997 of about 33 percent of preretirement earnings, compared with 34 percent if no change was made.

This reduction in the replacement rates would lower Social Security outlays by about $11.8 billion over the 1997-2002 period and by more in later years. Moreover, this option would reduce the benefits of all future retirees by essentially the same percentage. Furthermore, the option could be combined with a one-time cut in the cost-of-living adjustment to ensure that benefits for both current and future recipients would be reduced to a similar extent (see ENT-48). The combination would generate substantial budgetary savings, while having a relatively small impact on both current and future beneficiaries.

Opponents contend that the Social Security Amendments of 1983 have already sharply reduced the benefits of future retirees and that further reductions would be unfair. In particular, the age at which unreduced Social Security retirement benefits are first available will rise in stages from 65 to 67 for workers turning 62 between 2000 and 2022. As a consequence, benefits for workers retiring after the turn of the century will be less than what would have been received had the full retirement age not been increased. For example, a worker who retires at age 62 in 2022 will receive 70 percent of the primary insurance amount, compared with 80 percent for a worker who retires at age 62 in 1996.

An alternative method of reducing Social Security benefits would leave replacement rates unchanged but narrow the AIME brackets over which those rates apply, perhaps by reducing the pace at which the brackets are indexed for inflation. That approach would exempt beneficiaries with the lowest AIME from the cut, but would impose benefit reductions unevenly among other recipients.

ENT-40 LENGTHEN THE SOCIAL SECURITY BENEFIT COMPUTATION PERIOD BY THREE YEARS

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Outlays	50	190	480	930	1,500	2,140	5,290

Social Security retirement benefits are based on the average indexed monthly earnings (AIME) of workers in jobs covered by the system. The present formula computes AIME based on workers' best 35 years of employment. Lengthening the averaging period would generally lower benefits slightly by requiring more years of lower earnings to be factored into the benefit computation. This option would increase the AIME computation period gradually until it reached 38 years for people turning 62 in 1999 or beyond. That approach would save $5.3 billion over the next six years and more in later years.

One argument for a longer computation period is that people are now living longer and the normal retirement age for the Social Security program will be raised beginning in 2000. In addition, lengthening the averaging period would reduce the advantage that workers who postpone entering the labor force have over those who get jobs at younger ages. Because many years of low or no earnings can be ignored in calculating AIME, the former group currently experiences little or no loss of benefits for its additional years spent not working and thus not paying Social Security taxes.

Opponents argue that because some beneficiaries elect early retirement for such reasons as poor health or unemployment, this proposal would adversely affect recipients who were least able to continue working. Other workers who would be disproportionately affected include those with significant periods outside the Social Security system, such as parents--usually women--who interrupted their career to rear children and workers who were unemployed for long periods of time.

ENT-41 ELIMINATE SOCIAL SECURITY BENEFITS FOR CHILDREN OF RETIREES AGES 62 TO 64

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Outlays	90	250	420	510	510	520	2,300

Unmarried children of retired workers are eligible for Social Security benefits as long as they are under age 18, or attend elementary or secondary school and are under age 19, or become disabled before age 22. A child's benefit is equal to one-half of the parent's basic benefit, subject to a dollar limit on the maximum amount receivable by any one family. If such benefits were eliminated for the children of retirees ages 62 through 64, beginning with retirees reaching 62 in October 1996, the savings would total $2.3 billion over the next six years.

This option might encourage some early retirees to stay in the labor force longer. At present, although benefits for retired workers and their spouses are actuarially reduced if retirement occurs before age 65, children's benefits are not. Further, the younger the workers are, the more likely they are to have children under 18. Thus, workers under 65 now have an incentive to retire while their children are still eligible for benefits, although that incentive is quite small for families in which spouses are also entitled to dependents' benefits. For those families, the increase in total benefits attributable to all eligible children cannot exceed 38 percent of the worker's primary insurance amount.

However, for families with workers whose retirement was not voluntary--because of poor health or unemployment, for example--the loss in family income might cause some hardship. Moreover, since spouses under 62 receive benefits only if their children under age 16 also receive benefits, eliminating children's benefits for families of early retirees would also result in the entire loss of benefits for spouses in some families. In such cases, the total loss of income would generally be large.

A different approach would apply the same actuarial reduction to children's benefits that is applied to the benefits of the worker on whom those benefits depend. Thus, for example, the child of a worker retiring at age 62 would receive a maximum of 40 percent of the parent's basic benefit, instead of the 50 percent that is currently allowed. Such an approach would avoid large losses in benefits for workers with young children, but would save less.

ENT-42 CONSIDER VETERANS' COMPENSATION WHEN DETERMINING SOCIAL SECURITY DISABILITY INCOME PAYMENTS

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
			Coordinate Benefits for All Veterans Receiving Compensation				
Outlays	75	105	120	130	140	150	720
			Coordinate Benefits for Veterans Newly Awarded Disability Insurance				
Outlays	5	20	40	55	75	90	285

People with disabilities may qualify for cash payments from more than one source, including the Social Security Disability Insurance (DI) program, veterans' compensation, workers' compensation, means-tested programs like Supplemental Security Income, and private disability insurance. If they are younger than 65 and covered under Social Security, workers who are unable to work because they are physically or mentally impaired may qualify for DI payments.

When Social Security beneficiaries are eligible for multiple disability benefits, ceiling arrangements limit combined public disability benefits to 80 percent of the workers' average earnings before they were disabled. The combined payment after the reduction is adjusted periodically for changes in the cost of living and in national average wage levels. Veterans' compensation payments for disabilities, however--as well as means-tested benefits and certain benefits based on public employment--are not included when applying the ceiling.

Approximately 2.2 million veterans--about 1.3 million of whom are under age 65--receive compensation for service-connected disabilities. The amount of compensation is based on a rating of an impairment's average effect on a person's ability to earn wages in civilian occupations. Additional allowances are paid to veterans whose disabilities are rated 30 percent or higher and who have dependent spouses, children, or parents. An estimated 100,000 veterans who receive compensation also receive DI payments from the Social Security program.

This option, which has two variations, would include veterans' compensation within the scope of the ceiling. (The combined payment, however, would never be less than either the DI benefit or the veterans' compensation payment.) Under both versions, compensation would be totaled when determining how much the DI benefit of an individual who is under 65 years old would be reduced to keep the combined benefit from exceeding the ceiling. One version of the option would apply that change to all current and future recipients of DI benefits. The other version would limit application of the option to veterans who newly qualify for DI benefits.

Applying the change to both current and future recipients of veterans' compensation would affect an estimated 30,000 recipients in 1997 and would save an estimated $720 million over the 1997-2002 period. Applying the change only to veterans who were newly awarded compensation payments would affect an estimated 20,000 recipients by 2002 and would save an estimated $285 million over the 1997-2002 period.

Putting those options into effect would mean that an explicit policy would determine the total amount of public compensation for veterans who have service-connected disabilities. Thus, the federal gov-

ernment would treat in a more consistent way people who receive cash disability payments from multiple programs that are not means-tested. Both versions of the option could, however, be seen as subjecting Social Security disability benefits to a form of income testing. Moreover, under the variation of this option that would apply to current recipients of DI benefits, the incomes of some disabled veterans would drop.

ENT-43 END FUTURE VETERANS' COMPENSATION PAYMENTS FOR CERTAIN VETERANS WITH LOW-RATED DISABILITIES

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	31	97	165	237	312	390	1,232
Outlays	29	91	160	250	287	384	1,201

Approximately 2.2 million veterans who have service-connected disabilities receive veterans' disability compensation benefits. The amount of compensation is based on a rating of the individual's impairment that is intended to reflect an average reduction in the ability to earn wages in civilian occupations. Veterans' disability ratings range from zero to 100 percent (most severe). Veterans unable to maintain gainful employment who have ratings of at least 60 percent are eligible to be paid at the 100 percent disability rate. Additional allowances are paid to veterans who have disabilities rated 30 percent or higher and who have dependent spouses, children, or parents. Receiving veterans' disability compensation does not affect the level of Social Security disability benefits to which an individual may be entitled (see ENT-42).

About 60,000 veterans who have disability ratings below 30 percent are added to the rolls every year, receiving benefits of between $72 and $174 a month. Federal outlays could be reduced by $1.2 billion during the 1997-2002 period by ending benefits for low-rated disabilities in future cases.

Ending compensation benefits in the future for veterans with disability allowances below 30 percent would concentrate spending on the most impaired veterans. Because performance in civilian jobs depends less now on physical labor than when the disability ratings were originally set, and because improved reconstructive and rehabilitative techniques are now available, physical impairments rated below 30 percent may not reduce veterans' earnings. Low-rated disabilities include conditions such as mild arthritis, moderately flat feet, or amputation of part of a finger--conditions that would not affect the ability of veterans to work in many occupations today.

Veterans' compensation could be viewed, however, as career or lifetime indemnity payments owed to veterans disabled to any degree while serving in the armed forces. Moreover, some disabled veterans --especially older ones who have retired--might find it difficult to increase their working hours or otherwise make up the loss in compensation payments.

ENT-44 END VETERANS' DISABILITY AND DEATH COMPENSATION AWARDS IN FUTURE CASES WHEN A DISABILITY IS UNRELATED TO MILITARY DUTIES

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	46	140	240	345	455	555	1,779
Outlays	41	130	229	370	407	544	1,719

Veterans are eligible for disability compensation if they either receive or aggravate disabilities during active military service. Service-connected disabilities are defined as those resulting from diseases, injuries, or other physical or mental impairments that occurred or were intensified during military service, excluding those resulting from willful misconduct. Disabilities need not be incurred or made worse while performing military duties to be considered service-connected; for example, disabilities incurred while on leave also qualify. The federal government gives death compensation awards to survivors when a service-connected disability is related to the cause of death.

As many as 50 percent of veterans receiving compensation payments may be receiving compensation for injuries or diseases not related to the performance of military duties. Ending disability and death compensation awards in future cases in which a disability is neither incurred nor aggravated while performing military duties would reduce outlays by more than $1.7 billion over six years. Approximately 3 percent of those savings would come from reduced death compensation awards.

This option would make disability compensation of military personnel comparable with disability compensation of federal civilian employees under workers' compensation arrangements. Because military personnel are assigned to places where situations may sometimes be volatile, however, they have less control than civilians over where they spend their off-duty hours. Therefore, in many cases it might be difficult to determine whether a veteran's disease, injury, or impairment was entirely unrelated to military duties. The formal appeals system of the Department of Veterans Affairs (VA) could be extended to cover rulings specifying that disabling conditions were unrelated to military duties.

Data collected by the VA indicate that about 230,000 veterans receive VA compensation payments totaling $1.1 billion a year for diseases that the General Accounting Office (GAO) reports are generally neither caused nor aggravated by military service. The diseases include arteriosclerotic heart disease, diabetes mellitus, multiple sclerosis, Hodgkin's disease, chronic obstructive pulmonary disease (including chronic bronchitis and pulmonary emphysema), hemorrhoids, schizophrenia, osteoarthritis, and benign prostatic hypertrophy. Ending new awards for veterans with those diseases would have a more limited impact than this option because it would not affect all veterans whose compensable disabilities are not connected with military service. It could, however, eliminate compensation for some veterans whose disabilities GAO finds are not generally service-connected but whose circumstances constitute an exception from this general conclusion. That approach would yield smaller savings than the previous measure--about $600 million over the 1997-2002 period.

ENT-45 ELIMINATE "SUNSET" DATES ON CERTAIN PROVISIONS FOR VETERANS IN THE OMNIBUS BUDGET RECONCILIATION ACT OF 1993

Savings from Current-Law Spending	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Budget Authority	0	0	439	466	494	521	1,920
Outlays	0	0	438	502	456	520	1,916

Four provisions in law that affect veterans will cease to apply on September 30, 1998--their "sunset" date. As a result, starting in 1999, outlays will be higher than if the provisions remained in effect. Those provisions have:

- Protected the monthly benefit for certain pensioners who have no dependents and are eligible for Medicaid coverage for nursing home care, thus saving the Department of Veterans Affairs (VA) pension costs but increasing costs for the Medicaid program, which is paid for by the federal and state governments;
- Authorized the Internal Revenue Service to help the VA verify incomes reported by beneficiaries, for the purpose of establishing eligibility for pensions and benefits;
- Authorized the VA to collect from any health insurer that contracts to insure a veteran with service-connected disabilities the reasonable cost of medical care provided by the VA for the treatment of non-service-connected disabilities; and
- Authorized the VA to charge copayments to certain veterans receiving inpatient and outpatient care and outpatient medication from agency facilities.

This option would make the effects of those provisions permanent by eliminating the sunset date in each case. If all four provisions were made permanent, savings from current-law spending during the 1997-2002 period would total almost $2 billion.

The main advantage of this option is that it would convert the temporary savings achieved by those provisions into continuing savings. The main disadvantage of the option is that certain veterans or their insurers would be worse off financially. States would also face higher Medicaid costs because of withdrawn federal funds for nursing home care.

ENT-46 ELIMINATE THE PRESIDENTIAL ELECTION CAMPAIGN FUND AND RAISE THE LIMIT ON PRESIDENTIAL CAMPAIGN CONTRIBUTIONS BY INDIVIDUALS

Savings from Current-Law Spending	Annual Savings (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Outlays	0	0	26	235	4	1	266

Presidential campaigns are unique among contests for federal office because, by and large, they are financed by public money. Under current law, the public finances a large share of the costs of Presidential campaigns through the federal income tax "check-off" program. By voluntarily designating a portion of their annual federal income tax liability--$3 for individual filers and $6 for joint returns--taxpayers earmark funds for the Presidential Election Campaign Fund (PECF). Subsequently, during each Presidential election cycle, those public funds are made available by the Treasury to Presidential candidates and political parties that are certified by the Federal Election Commission as meeting federal eligibility requirements. During the 1992 Presidential campaign, for example, about $175 million was disbursed from the PECF. By contrast, candidates for office in the Senate or House of Representatives rely solely on private funds to cover the costs of their campaigns.

In return for public funding, Presidential candidates and political parties agree to comply with federally imposed limits on campaign expenditures. Candidates who do not accept public funding, the Supreme Court has ruled, may not be restricted in their spending. However, all candidates must adhere to federal limits on campaign contributions that restrict donations by individuals to $1,000. That is the same limit that was imposed in 1974 when contribution limits first became effective.

The Congress could eliminate the Presidential Election Campaign Fund after the 1996 election cycle and raise the threshold on contributions by individuals to account for price changes since 1974. A similar proposal was included in the original version of the Senate budget resolution for fiscal year 1996. By terminating the check-off program and raising the contribution limit, the government could save between $250 million and $300 million over the next six years, and Presidential candidates and political parties would be given sufficient notice to adjust their fundraising activities.

Public funds are provided through the PECF in three main ways. First, dollar-for-dollar matching funds for contributions by individuals of up to $250 are made available to Presidential primary candidates who meet federal eligibility requirements. To become eligible, candidates must raise $5,000 or more in each of 20 states in matchable individual contributions of $250 (that is, $100,000 in all).

Second, the PECF provides entitlements to major political parties to cover the costs of nominating conventions. It also gives grants to existing minor political parties but in amounts that are a fraction of those for major parties. New political parties, however, are not eligible to receive grants for nominating conventions.

Third, the PECF provides entitlements to the general election candidates of major parties and to the candidates of minor and new parties, but in lesser amounts. The candidates of minor political parties may receive funding on the basis of political performance in the previous Presidential election, and post-election subsidies are made available to candidates of new parties on the basis of electoral performance. For example, if Ross Perot had participated in the public funding program in 1992, he would have been eligible to receive about $26 million in postelection funding. By contrast, the major party candidates each received $55.2 million after their party's nominating convention--the amount of the general election spending limit before the November 1992 election.

Critics of public financing for Presidential campaigns assert that the current system has not achieved its primary objectives of limiting the influence of special interests and eliminating the potential for financial misdeeds in Presidential elections. They also maintain that the limits on contributions by individuals and on campaign spending by candidates who accept public money are excessively low: the individual limit has never been adjusted to reflect growth in prices since 1974, and the spending limits do not reflect general trends in election spending. As a result, candidates are forced to devote a disproportionate share of their time to fundraising activities, and political parties and candidates are encouraged to exploit loopholes in the law and search for ways to circumvent spending and contribution caps.

In addition, many critics find little justification in providing such a large targeted benefit; millions of dollars in taxpayer funds are given to a handful of major party Presidential candidates, to well-financed political parties for nominating conventions, and to fringe candidates with no real chance of electoral success. Other critics argue that the eligibility requirements strongly favor the major parties at the expense of minor and new parties. They contend that a system of reasonable and strictly enforced contribution limits in conjunction with full public disclosure could better serve the public interest and reduce the costs of government.

Some critics also argue that the public funding system has had a negative impact on the electoral process. Because of the rigid limits imposed by the Federal Election Campaign Act of 1971 on candidates who accept public funds and on the activities of volunteers, they contend that the system has encroached on direct participation by voters and dampened civic enthusiasm. In the five Presidential elections that have taken place with public funding, average voter turnout was 11.5 percent lower than in the five previous elections without public funding. Finally, critics point to the income tax check-off program as evidence that a majority of citizens are opposed to public funding; less than 20 percent of taxpayers have checked the box on their income tax returns during the 1990s.

Proponents of public funding point to the system's quiet successes. They contend that Presidential elections have been free from major financial scandal and corruption since the system's inception, and the outcomes of elections have been determined largely on the merits of issues and individual candidates rather than the ability to solicit large donations. Moreover, it is argued that through the PECF, the government is simply protecting the integrity of the electoral process and that the funding provided is not a high price for the nation to pay. Similarly, public funding has permitted several candidates who might otherwise have been shut out for lack of resources to make meaningful contributions to the national debate. In addition, those in favor of public funding assert that the money that minor party candidates qualify for constitutes a very small portion of total public spending on presidential elections and increases the chance that new voices will be heard in the campaign.

Proponents also claim that public financing has tempered the influence of special-interest money and contained the runaway cost of elections. Substituting higher limits on individuals' contributions for public funding, it is argued, would give undue political influence to wealthy contributors. Last, supporters of the current system argue that people who participate through the check-off program compose the single largest group of contributors to political campaigns--larger than direct contributors, campaign and party volunteers, or voters in Congressional elections. Thus, terminating the check-off program would significantly narrow the base of political contributors.

ENT-47 IMPOSE A COST-OF-CAPITAL OFFSET FEE ON FANNIE MAE AND FREDDIE MAC

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	800	800	800	800	800	800	4,800
Outlays	800	800	800	800	800	800	4,800

The interest rate that a firm must pay to borrow money depends on its credit rating. Greater financial strength in a borrower implies a higher level of credit quality (that is, less risk to the lender) and generally lowers the interest and other costs that borrowers must pay to obtain funds. But financial strength--especially when it is based on large amounts of shareholder-provided equity--comes at a price: shareholders must be compensated for the use of their money, which is at risk while it is raising the credit rating of the company.

The federal government helps government-sponsored enterprises (GSEs) reduce the cost of money from all sources by putting taxpayers' equity behind the GSEs' financial obligations. (A GSE is an enterprise that is established and chartered by the government for a specific financial purpose but is wholly owned by private stockholders.) The government's equity infusion is based on several provisions of law, including one that exempts the GSEs from many federal and state regulations designed to protect investors, and another that gives the GSEs a line of credit at the U.S. Treasury. Through such laws, the federal government sends a signal to investors that promises issued by a GSE are less risky than the GSE's financial condition would suggest. In other words, the federal government is a "shadow" provider of equity capital to the GSE; it stands in for other investors whose capital would be required in the government's absence to bolster the GSE's credit rating, and who would demand compensation for the use of their money.

As a consequence of the federal presence, GSEs are able to obtain funds in the capital markets at lower interest rates than those paid by private borrowers of comparable financial condition. Although estimates are uncertain, two of the GSEs--the Federal National Mortgage Association (FNMA, or Fannie Mae) and the Federal Home Loan Mortgage Corporation (FHLMC, or Freddie Mac)--probably save 70 cents (70 basis points) every year on every $100 of long-term debt that they owe because of their affiliation with the federal government. On mortgage-backed securities (MBSs) issued and guaranteed by the two GSEs, the cost advantage is smaller; nevertheless, it is probably about 40 cents (40 basis points) for every $100 of securities outstanding each year. Although those amounts might seem to be of small benefit, they add up to more than $6 billion a year because Freddie Mac and Fannie Mae have well over $1 trillion in outstanding securities. GSEs do not pay the government a fee or any other monetary compensation for the reduced cost of capital that they enjoy as a result of their status as sponsored enterprises. Instead, the GSEs pass through some of the savings in lower mortgage interest rates and provide mortgage market stabilization and leadership functions for the government.

More than 20 years ago, the federal government chartered Freddie Mac and Fannie Mae to give local retail mortgage lenders a conduit to the vast sums of money available in the bond markets. In doing so, the government hoped to avoid periodic credit shortages for home buyers. Federal policy giving mortgage lenders access to Wall Street through Fannie Mae and Freddie Mac has clearly succeeded. In successfully channeling money from investors to home buyers and back to investors, the housing GSEs have demonstrated the profitability of such activity. Consequently, credit is now reliably available to home buyers at all times. But an unfortunate side effect has been that the two GSEs now virtually monopolize the resale, or "secondary," market for the home mort-

gages they are permitted to buy. The GSEs dominate the market because the federal government's dividend-free equity reduces the cost of funds below that available to private competitors.

An offset fee based on the savings in capital costs that Freddie Mac and Fannie Mae derive from federal affiliation would be a step toward more equitable competition in the secondary market. In addition, it would partially compensate taxpayers for the value of the capital services that the government provides. Because of the differential effect of federal affiliation, fees need not be applied to both debt and mortgage-backed securities. (Such securities essentially give their buyers rights to share in the future stream of income generated by a large pool of mortgages put together by the GSE.) In fact, a fee of 20 basis points on average debt outstanding and no fee at all on MBSs would produce annual federal collections of $800 million based on the outstanding debt of the GSEs.

Initially, the fee would reduce the two GSEs' net income, which was $3.2 billion ($4.9 billion before contribution and taxes) in 1995. If the GSEs were unable to offset any of the fee, their after-tax return on shareholders' investments would fall by 3 or 4 percentage points--Fannie Mae's from 21 percent return on equity in 1995 and Freddie Mac's from 20 percent. Fannie Mae and Freddie Mac, however, could choose to avoid the fee by switching their financing sources from debt securities to MBSs. The housing GSEs may be reluctant to switch their funding to MBSs because the federal subsidy on debt would remain higher than on MBSs after the fee. Since no fee would be applied to MBSs, there would be no need for mortgage interest rates to rise.

From the taxpayers' perspective, a disadvantage of the fee is that it would reduce the market value of the enterprises and thereby reduce the cost to investors of "abandoning" the GSE to the government and sticking taxpayers with any accumulated losses. Of course, that is a disadvantage of any proposal that would reduce GSE subsidies, which are supporting the market value of the enterprises. As a reduction in the subsidy given to Fannie Mae and Freddie Mac, collections from the fee would be credited to a Treasury account as offsetting receipts, which are paid into the general fund. That same treatment has been applied to such fees proposed in the budget requests of previous Presidents.

Several federal agencies, including the Congressional Budget Office, are studying the feasibility and desirability of privatizing Freddie Mac and Fannie Mae. If the Congress decided to sever the federal government's links to those GSEs and thereby terminate the subsidy, the cost-of-capital offset fee would need to be repealed.

ENT-48 RESTRICT COST-OF-LIVING ADJUSTMENTS IN NON-MEANS-TESTED BENEFIT PROGRAMS

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Eliminate COLAs for One Year							
Social Security and Railroad Retirement	7,560	10,240	10,440	10,480	10,470	10,440	59,620
Other Non-Means-Tested Programs	1,850	2,530	2,530	2,560	2,570	2,650	14,690
Offsets in Means-Tested Programs and Medicare Premiums	-260	-350	-360	-370	-380	-390	-2,100
Total	9,150	12,420	12,610	12,670	12,660	12,700	72,210
Limit COLAs to Two-Thirds of the CPI Increase for Six Years							
Social Security and Railroad Retirement	2,520	6,300	10,300	14,330	18,470	22,760	74,680
Other Non-Means-Tested Programs	620	1,560	2,500	3,440	4,370	5,460	17,940
Offsets in Means-Tested Programs and Medicare Premiums	-90	-220	-670	-900	-1,370	-1,630	-4,870
Total	3,050	7,640	12,130	16,870	21,470	26,590	87,750
Limit COLAs to the CPI Increase Minus 0.5 Percentage Points for Six Years							
Social Security and Railroad Retirement	1,350	3,230	5,240	7,330	9,510	11,770	38,430
Other Non-Means-Tested Programs	330	800	1,270	1,760	2,250	2,820	9,230
Offsets in Means-Tested Programs and Medicare Premiums	-50	-110	-340	-460	-690	-830	-2,470
Total	1,630	3,920	6,170	8,630	11,070	13,760	45,190
Pay the Full COLA on Benefits Below a Certain Level and 50 Percent of the COLA on Benefits Exceeding That Level for Six Years							
Social Security and Railroad Retirement	0	1,150	2,700	4,250	5,830	7,430	21,370

Under current policies, outlays for Social Security and other non-means-tested cash transfer programs whose benefits are indexed to the consumer price index (CPI) are expected to total about $460 billion in 1997 and to rise to $580 billion by 2002. Reducing the automatic cost-of-living adjustment (COLA) for those programs is commonly proposed as one way to slow the growth in entitlement spending. Four strategies for reducing COLAs and the savings in outlays resulting from each are shown in the preceding table. The programs in which COLAs would be reduced under the first three options are Social Security Old-Age, Survivors, and Disability Insurance; Railroad Retirement; Civil Service Retirement; Military Retirement; workers' compensation for federal employees; veterans' compensation; and retirement benefits for the Foreign Service, the Public Health Service, and the Coast Guard. The fourth option would affect only Social Security and Railroad Retirement Tier I COLAs. (Other options for achieving savings in Social Security are given in ENT-39 through ENT-42, REV-15, and Chapter 7.)

COLA restrictions would achieve considerable savings by exacting small reductions in benefits from a large number of people, in contrast to other budget options that would impose large reductions in benefits on smaller groups of recipients. Moreover, limiting these options to the non-means-tested cash benefit programs would protect many of the poorest beneficiaries of entitlements--for example, recipients of Supplemental Security Income--from losses of income. Finally, because the benefit levels would be permanently lowered for eligible people when the COLA limitation was established, significant reductions in outlays would persist beyond the six-year projection period. The savings would eventually disappear, however, as beneficiaries died or stopped receiving payments for other reasons, unless the COLA limitation was accompanied by a permanent reduction in the initial benefits of newly eligible workers (see ENT-39).

Another argument in favor of less-than-complete price indexing is that the consumer price index (CPI) probably overstates increases in the cost of living for the population as a whole. Many analysts feel that the CPI overstates increases in the cost of living, although that is a contentious issue. Perhaps the greatest sources of overstatement involve the treatment of quality change and new goods in the CPI, but the empirical evidence on those problems is limited. The degree to which the CPI may overstate the cost of living for the general population may be different than for people who receive Social Security benefits, but little research has been focused on that issue. In short, although it is possible that the current indexing scheme overcompensates beneficiaries for price change, the evidence is insufficient to determine how much overstatement occurs. To the degree that the CPI overstates increases in beneficiaries' cost of living, the COLA could be reduced without lowering beneficiaries' real benefits below what they received when they became eligible for the program.

Budget reduction strategies that institute less-than-complete price indexing would result in financial difficulties for some recipients--particularly if COLAs were restricted for an extended period. Restrictions on COLAs also encounter opposition from people who fear that changes made to reduce budget deficits would undermine the entire structure of retirement income policy. For example, because private pension plans generally do not offer complete indexing, restricting Social Security COLAs would further reduce protection for beneficiaries against inflation. Some people also think that, because Social Security and other retirement programs represent long-term commitments to both current retirees and today's workers, the programs should be altered only gradually and then only for programmatic reasons. According to that view, any changes in benefits should be announced well in advance to allow people to adjust their long-range plans.

Unless restrictions on COLAs were accompanied by commensurate changes in determining initial benefits for new recipients, disparities in benefit levels would develop among different cohorts of retirees. That situation is particularly relevant for Social Security, in which benefits for newly eligible individuals are based on an indexed benefit formula and on indexed earnings histories. For example, if prices rose by 4 percent in a year and the wage index used to compute benefits for newly eligible recipients increased by 5 percent, the act of eliminating that year's COLA without changing the calculation of initial benefits would produce benefits for new beneficiaries that were about 5 percent higher than for recent retirees; under current law, benefits would be only about

1 percent higher for the new retirees. To alleviate that problem and to achieve additional savings, efforts to slow the growth in benefits through COLA limitations might be extended to the formulas for determining initial benefits (see ENT-39).

There are several options to restrict COLAs for current beneficiaries. Except for the option to limit COLAs to 0.5 percentage points less than the increase in the CPI, the magnitude of the savings in each case--as well as the impact on beneficiaries--would be very sensitive to the level of inflation in the years in which the COLAs would be reduced. If prices were to rise faster than currently assumed, savings would be greater than shown, and recipients would bear larger costs. If prices were to rise less quickly, both budgetary savings and the effect on recipients would be smaller.

The following are specific versions of COLA restrictions:

Eliminate COLAs for One Year. One option would be to eliminate COLAs in 1997 for non-means-tested benefit programs and allow them to be paid in subsequent years, but with no provision for making up the lost adjustment. If that approach was taken, federal outlays would be reduced by about $9.2 billion in 1997 and $72.2 billion over six years, with Social Security and Railroad Retirement accounting for most of the total.

Limit COLAs to Two-Thirds of the CPI Increase for Six Years. Under this approach, recipients would be compensated for only a certain proportion of inflation, such as two-thirds of the annual CPI increase. Based on the current economic assumptions of the Congressional Budget Office, applying this restriction for six years would save about $3.1 billion next year and $87.8 billion over the 1997-2002 period. As a result, benefits for people who received payments throughout the six-year period would be about 5 percent less in 2002 than they would have been under full price indexing. Furthermore, this option would reduce the real income of beneficiaries at the same time that they were becoming less able to supplement their income by working.

Limit COLAs to the CPI Increase Minus 0.5 Percentage Points for Six Years. An approach similar to the proportionate COLA reduction would be to reduce the adjustment by a fixed number of percentage points; for example, set the adjustment at the CPI increase minus 0.5 percentage points. Unlike other options to restrict COLAs, however, both savings and effects on beneficiaries would be roughly the same regardless of the level of inflation--about $45.2 billion over the next six years, if extended for the full period.

Pay the Full COLA on Benefits Below a Certain Level and 50 Percent of the COLA on Benefits Exceeding That Level for Six Years. Another alternative would tie the COLA reductions to beneficiaries' payment levels, starting in 1998. The example discussed here--based only on Social Security and Railroad Retirement Tier I benefits--would award the full COLA for benefits based on the first $665 of a retiree's monthly primary insurance amount (PIA) and 50 percent of the COLA on benefits above that level. The $665 per month threshold is about equal to the projected 1998 poverty level for an elderly person and would be indexed to maintain its value over time.

This approach would save about $1.2 billion in 1998 and $21.4 billion over the 1998-2002 period. Because of the time needed to carry out the proposal, those estimates assume that it would be in place by January 1998.

Since the full COLA would be paid to beneficiaries with low PIAs, this option would ensure that low-income recipients were not adversely affected. Moreover, its percentage impact would be greater for recipients with higher benefits. Nonetheless, benefit levels are not always good indicators of total income. Some families with high benefits have little other income, whereas some with low benefits have substantial income from other sources. Furthermore, many people object to any changes in retirement programs that might be construed as introducing a means test for benefits, even if the test is limited only to the COLA.

A variation would extend this approach to the other non-means-tested benefit programs besides Social Security; that variation is not shown in the table. Such an option would spread the effects among a wider group of recipients, although it might be some-

what more complicated to design because the different benefit structure in each program could require a separate determination of the appropriate benefit levels on which to pay reduced COLAs.

Eliminating COLAs for recipients whose benefits are based on PIAs above a certain level is another option. Because such a reduction would affect the entire benefit of each recipient above the threshold, not just the portion of the benefit above that level, both the savings and the impacts on beneficiaries would be considerably greater. Unless adjustments were made at the threshold, however, recipients with benefits just below the threshold could be made better off than those with benefits just above it. Still another approach that would address some of the administrative problems of those two options would involve increased taxation of Social Security benefits (see REV-15).

ENT-49 APPLY MEANS TESTS TO FEDERAL ENTITLEMENTS

Savings from Current-Law Spending	1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
	Annual Savings (Millions of dollars)						
Make Entitlements Subject to Individual Income Tax							
Non-Means-Tested Entitlements	18,600	54,100	58,600	63,400	68,400	73,700	336,800
All Entitlements	21,300	63,600	69,200	75,300	81,500	88,100	399,000
Reduce Entitlements Provided to Middle- and High-Income Families							
Non-Means-Tested Entitlements	11,300	53,100	49,800	53,400	57,100	61,100	285,800
All Entitlements	11,300	56,300	53,300	57,300	61,300	65,800	305,300
Deny Entitlements to High-Income Recipients							
Non-Means-Tested Entitlements	4,700	11,500	10,600	11,300	12,100	12,900	63,100
All Entitlements	4,700	11,600	10,800	11,600	12,400	13,300	64,400

NOTE: Estimates do not include administrative costs or revenue losses from reductions in taxable benefits.

There are two basic approaches to constraining entitlement spending. One broad strategy would reduce the growth of spending (or tax the benefits at higher rates) on a program-by-program basis. New program rules or tax laws could limit who qualifies for benefits, reduce the amount of benefits provided, or change the taxation of benefits. (Examples of that kind of approach include ENT-40, ENT-43, ENT-48, REV-15, and REV-17.)

An alternative to the program-by-program approach would constrain entitlements as a group through some form of means-testing under which benefits were cut most for beneficiaries with the highest income. Three illustrations of that method are discussed here. The first approach would subject most entitlement benefits to federal individual income taxes, the second would reduce benefits as beneficiaries' income rose, and the third would deny benefits to individuals with income above specified thresholds. The savings attributed to those three approaches would be smaller than shown here if the Congress enacted one or more of the program-by-program approaches described in other options.

Some federal entitlements are already subject to limits on income or wealth under program regulations. The federal part of Supplemental Security Income (SSI) is available only to elderly and disabled people with monthly income below federally specified national limits. Aid to Families with Dependent Children (AFDC) goes only to families with children who have a monthly income below limits set by individual states. Recipients of SSI and AFDC are automatically eligible for Medicaid, as are certain people with low family income. Only households with a monthly income below the federal poverty guidelines qualify for food stamps. Because those and other

means-tested programs currently provide benefits only to people with low monthly income, subjecting them to any of the three methods of means-testing discussed here would duplicate the current means-testing at significantly higher income levels, imposing administrative and compliance costs but having little effect on net saving. At the same time, because each of the alternative approaches would impose an annual means test--as opposed to the monthly tests now used in each program--beneficiaries who qualified for assistance for only part of a year could lose some or all of their benefits. Budgetary savings for each approach are shown both including and excluding those transfers that are already means-tested.

Non-means-tested entitlement programs included here are Social Security and Railroad Retirement, Medicare, unemployment compensation, and veterans' benefits. Since Social Security and Medicare account for the bulk of entitlements, the options discussed here largely affect the elderly. The analysis excludes two other major entitlement programs--federal civilian and military pensions--because they are part of the labor contract between the government and its employees and not transfers in the same sense that the included programs are. Several options to constrain spending on those two excluded programs are discussed in ENT-27.

Means-testing could be based on individual income, income of couples, or the income of a more broadly defined family. The unit used determines which recipients would be affected by the alternative approaches, as well as how recipients might respond to means-testing. Because families generally consume as a unit, family income and wealth are probably better measures of need than individual income and wealth. At the same time, depending on how the means tests are structured, basing the tests on families could induce families to split up into smaller units to minimize benefit reductions. For example, in the approach to benefit reduction discussed below, a retired couple in which each spouse had $20,000 of pension and investment income and $10,000 of Social Security would lose $3,000 of their Social Security benefits; if they divorced, they would keep all of their benefits. Appropriate differentiation of benefit reductions for individuals and families of different sizes could reduce or remove such incentives for family breakup.

A significant objection to global means-testing of entitlements is that different programs serve different purposes. Individual programs provide people with separate types of in-kind consumption, such as food, housing, and medical care. Society may wish to ensure fuller access to those goods and services rather than simply provide more cash income. In that view, any limit on benefits should be imposed on a program-by-program basis to allow the use of different criteria.

Reducing entitlements to medical assistance raises special concerns. One problem is valuing medical services in dollar terms. One approach would base value on benefits actually received. That approach could yield unacceptable results because it would assign the highest values to the sickest people receiving the most care. Another approach would count the federal subsidy to in-kind programs as benefits. In Medicare, for example, the subsidy would be the implicit value of an insurance premium paid for by the government.

Means-testing benefits also poses a transitional problem, particularly for retirees. Recipients of benefits may have made financial decisions and plans expecting particular incomes from entitlements. Changing those benefits could impose hardships. Phasing in taxation of benefits or means tests over time would mitigate that difficulty.

Make All Entitlements Subject to Individual Income Tax. Under current law, some benefits of federal entitlement programs, such as unemployment compensation and military pensions, are fully subject to individual income taxes; others, such as Social Security, are partially so; and still others, such as Medicare and food stamps, are entirely excluded from taxable income. One approach to means-testing all entitlements would include in taxable income all federal entitlement benefits in excess of contributions made for specific programs. Thus, for example, the insurance value of Medicare in excess of premiums paid for Supplementary Medical Insurance coverage would become part of a recipient's taxable income. Program administrators would tell recipients annually the net value of benefits to report as taxable income, using a form 1099-G similar to the forms used to report dividend and interest income. Such inclusion for all entitlements would increase revenues

by about $21 billion in 1997 and nearly $400 billion from 1997 through 2002.

Taxing entitlements recognizes that they increase a recipient's ability to pay taxes in the same way that other forms of income do. Excluding some entitlement payments from taxable income simply because they come from the government could be viewed as violating the principle that taxes should be related to ability to pay. A counterargument, however, asserts that entitlements are not taxable now simply because benefit levels are set to be net of taxes. If those levels are too high, the Congress should reduce them within each individual program. Making benefits taxable has the advantage of providing a straightforward annual measure of recipients' needs for federal assistance. Even so, it could be difficult to justify including noncash benefits received from the government but not those provided by employers. That last objection is not an issue, however, if taxing benefits is viewed as a means of allocating scarce government resources to the most needy recipients.

Reduce Benefits Provided to Middle- and High-Income Families. The Concord Coalition has proposed that federal entitlement benefits be reduced rapidly as income rises. Benefit reduction could be achieved either through supernormal tax rates imposed under the individual income tax or directly through new programmatic structures. Under the Concord Coalition's proposal, families with income above $40,000 would lose benefits under a graduated scale beginning at 10 percent for those with income between $40,000 and $50,000 and increasing by 10 percentage points for each $10,000 of income up to 85 percent of benefits above $120,000 of total income. Nontransfer income would be considered first in determining the rate of benefit reduction, and benefits would be reduced only to the extent that they caused total income to exceed $40,000. For example, a family receiving $15,000 of Social Security and $30,000 of nontransfer income would lose $500 of benefits--10 percent of the $5,000 by which total income exceeds $40,000. If the family had $45,000 of nontransfer income, it would lose $2,500 of its Social Security--10 percent of the $5,000 that falls in the $40,000 to $50,000 income range and 20 percent of the $10,000 that falls in the $50,000 to $60,000 income range. A family with nontransfer income above $120,000 would have its benefits reduced by 85 percent. (Under the coalition's plan, married couples and larger families would face the same income limits as single people, and all dollar values would be indexed for inflation.)

This option would reduce benefits for all entitlements by about $11 billion in 1997 and $305 billion from 1997 through 2002. Compared with the option that would tax benefits, this proposal to reduce benefits would have no effect on families with lower income and a greater effect on families with higher income.

This approach reflects the view that entitlements should go primarily to those most in need of them, not to families with higher income. Imposing the same criteria for establishing need among all entitlement programs might be the fairest way to limit benefit payments. A global approach to benefit reduction could also be less costly to administer than an approach that addresses each program individually, although whether it would in fact cost less depends in large part on whether new administrative apparatuses would have to be created.

A significant problem with this option is the disincentive for families to save and earn other income that is created by the rapid reduction in benefits as income rises. That effect would be mitigated somewhat, however, if the benefit reduction was phased in gradually over a wide income range. Recipients with income well above the $120,000 level at which benefit reduction was greatest would face smaller or no disincentives, since they would have to lower their income greatly to incur a smaller benefit reduction. They would instead have some incentive to earn more if they wished to maintain the same level of total income. An alternative to forgoing income to lessen benefit reductions would be to shift income to sources that would not be counted in the benefit reduction formula. For example, if interest on tax-exempt bonds was not counted, entitlement recipients would be expected to shift their investments into those bonds. Such behavior could be limited, however, by counting as many forms of income as possible in determining benefit reductions.

Deny Entitlements to High-Income Recipients. Some Members of Congress have proposed a third approach to means-testing entitlements that would

deny completely any entitlement payments to recipients with income above specific limits. The budgetary savings shown assume limits of $100,000 for single recipients and $120,000 for married couples, with benefits phasing out over a $10,000 income range. This option would reduce spending on all entitlements by about $5 billion in 1997 and $64 billion over a six-year period. Compared with the proposal of the Concord Coalition to reduce benefits, this option would exempt middle-income families from benefit cuts and impose larger benefit reductions on families with the highest income.

This approach has many of the advantages of and problems faced by the alternative that would simply reduce benefits. Because benefits would be phased out over a narrow income band, however, the work and saving disincentives would be significantly greater for people with income near the cutoff level. Families with more than $10,000 in benefits and income in the phaseout range would face marginal tax rates of more than 100 percent from this provision alone. The narrower the band, the more likely potential recipients with an income in or just above the phaseout range would be to adjust the timing of their income receipts, forgo savings, or reduce work effort to stay under the income limit. At the same time, because beneficiaries with an income below the phaseout range would continue to receive full benefits, many fewer recipients would face work and saving disincentives than in the approach that would reduce benefits over a broad income range. Any reduction in work effort or savings would reduce the budgetary savings. Finally, this approach would also create incentives to shift income to sources excluded from the income calculation.

ENT-50 CHARGE FEDERAL EMPLOYEES COMMERCIAL RATES FOR PARKING

Savings from Current-Law Spending	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Budget Authority	110	110	110	120	120	120	690
Outlays	110	110	110	120	120	120	690

The federal government leases and owns more than 200,000 parking spaces, which it allocates to its employees--in most cases without charge. Requiring employees of the federal government to pay commercial rates for their parking could reduce the deficit by $690 million through 2002.

The vast majority of federal workers park without charge. For example, one survey of 10 agencies in Washington, D.C., found that 71 percent of federal workers who received parking from their agencies received it free of charge. Employees of the Congress also received free employer-provided parking. Federal workers who pay for parking are almost always charged less than the commercial rate, although federal agencies, with the approval of the General Services Administration, are allowed to charge their employees the higher commercial fees. Some Members of Congress support charging all federal employees parking fees set at commercial rates, an idea similar to a proposal made by President Carter. The Clinton Administration has also proposed greater incentives for agencies to charge higher rates for parking spaces.

Federal workers in the largest metropolitan areas would bear the brunt of the new charges. Those in the Washington, D.C., metropolitan area would be affected most, paying about 75 percent of the total charges. Federal employees in less commercially developed areas--where charging for parking is uncommon--would not face new fees. The estimated savings rely on the best available information about the number of federal parking spaces, commercial parking rates, and expected declines in the demand for parking by federal workers as a result of higher rates. Once commercial rates were instituted, however, it would be difficult to predict variations in parking rates, the number of spaces controlled by the federal government, and responses of federal workers.

In 1992, the Congress passed an energy policy law that contained a provision including as taxable income the commercial value of any parking provided free of charge by an employer--including the federal government--in excess of $155 per month (indexed for inflation beyond 1993). Paying for parking at commercial rates would reduce the gross income of such employees; however, the estimate of savings from this option does not include the reduction in tax revenues that would result, because available data do not allow an estimate of the option's effect on revenues. Analysts agree, however, that the offsetting reduction in revenues would be relatively small.

Proponents of charging commercial rates for employer-provided parking argue that subsidized parking increases the frequency with which workers drive to work, especially in single-occupancy vehicles. Those observers believe that higher prices for parking would decrease the flow of cars into urban areas by encouraging the use of public transportation or car pooling. In turn, they argue, a reduction in the number of cars would reduce energy consumption, air pollution, and congestion.

Some supporters of charging fees also maintain that the federal government would be acting as a model employer and could call more effectively on others to reduce pollution and energy consumption. In addition, charging commercial prices for parking would show more accurately the demand for parking by federal workers. At commercial rates, the supply of employer-provided parking may well exceed demand, which could lead to alternative uses of current

parking space. Moreover, commercial pricing would allocate spaces to those who valued them the most, thereby setting aside differences in income. Finally, some observers argue that the federal government can no longer afford to provide valuable goods and services free of charge to workers who can afford to pay for them.

Opponents of full-cost pricing for parking argue that it would unfairly penalize workers in urban areas who have difficulty obtaining access to alternative transportation or who drive to work for valid personal reasons. In the view of those critics, charging commercial rates for parking for federal workers effectively represents a cut in total compensation and is inappropriate, given other proposed reductions in federal employment and compensation. Some critics have also argued that free parking is a common form of compensation in the private sector. (However, in the Washington, D.C., metropolitan area, only 37 percent of parking spaces for private-sector workers were provided free of charge in 1991; 46 percent were priced at full commercial rates.) In addition, some people argue that the new charge will simply change the mix of federal employees using the parking spaces--higher-income employees will be favored over lower-income ones. Now, the allocation of parking spaces in many agencies is based on rank, seniority, or other factors; instituting fees for parking would ration spaces to employees who were willing to pay commercial rates.

If the funds collected from charging commercial rates for parking were used to finance other spending, the savings noted earlier in this option would be smaller or zero. The Administration, for example, has supported new incentives for agencies to charge higher rates for parking in order to subsidize the use of mass transit by their workers. That proposal would neither reduce nor enlarge the deficit because agencies would not rebate the fees to the Treasury but instead provide them to transit-using employees. The funds raised by this option would be counted as offsetting collections or offsetting receipts, depending on how the option was applied.

ENT-51 MAKE PERMANENT VARIOUS EXPIRING USER FEES INCLUDED IN THE OMNIBUS BUDGET RECONCILIATION ACTS OF 1990 AND 1993

Addition to Current-Law Receipts	Annual Added Receipts (Millions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Patent and Trademark Fees	0	0	119	119	119	119	476
Vessel Tonnage Charges	0	0	49	49	49	49	196
Rail Safety Fees	43	43	43	43	43	43	258

The Omnibus Budget Reconciliation Acts of 1990 and 1993 (OBRA-90 and OBRA-93) created user fees for a variety of services that the federal government provides to private parties. OBRA-90 enacted rail safety fees for 1991 through 1995. OBRA-93 levied fees on vessel tonnage and imposed patent and trademark fees that will expire in 1998. Extending those fees could raise $930 million in receipts for 1997 through 2002, providing offsetting receipts in the budget functions designated for commerce and transportation.

The general argument for user fees applies to each of the proposals included in this option; namely, that the recipients of government services should bear the cost of those that clearly benefit a specific group. Accordingly, patent and trademark fees are established to cover the cost of providing services to would-be holders of a patent or trademark. The vessel tonnage fee is collected on all vessels entering a U.S. port and helps support the general operations of the Coast Guard. The fees charged to railways offset the cost of the government's railway safety activity.

Antithetically, it can be argued that services provided by the government ultimately benefit the general populace and should be paid for by all taxpayers rather than a specific group. Those who advocate the repeal of specific fees argue that charges were unevenly applied among users or, directly or indirectly, inflicted undue costs on payers.

Chapter Six

Medicare and Medicaid: Deficit Reduction and Program Restructuring

Federal health care costs have escalated sharply over the past two decades, accounting for an increasing share of the budget. Medicare and Medicaid, which finance the health care of millions of Americans, are among the largest entitlement programs. Only Social Security is larger than those programs. In 1996, federal spending on Medicare and Medicaid is expected to reach $300 billion, or nearly 20 percent of the federal budget.

Overall entitlement spending has grown at a rapid clip since the early 1960s, largely because of the creation of Medicare and Medicaid in 1965 and their subsequent pattern of burgeoning spending increases. Under current law, outlays for Medicare and Medicaid are expected to rise markedly, at a combined average annual rate of 9.2 percent between 1996 and 2002. By comparison, spending for all other entitlements is projected to increase by an average of 5 percent a year during the same period, without any changes in those programs. By 2001, federal spending on the health care entitlements will top Social Security spending for the first time.

Left unchecked, the outlook for federal health spending is even more dire outside the budget window. The United States is currently in a period of historically low growth in Medicare enrollment--as the baby-bust generation, born during the depression and war years of the 1930s and 1940s, reaches age 65. Only after 2010, when the first wave of the baby-boom generation reaches 65, will Medicare enrollment begin a two-decade-long period of exceptionally swift growth. Demand for services under Medicare will increase dramatically during that time, as succeeding baby-boom cohorts continue to enter the program through 2030. In addition, the number of low-income elderly people eligible for Medicaid, already growing considerably faster than the elderly population overall, will also swell. The demand for long-term care services covered by Medicaid is likely to mount substantially thereafter.

How much budget stringency will be needed in Medicare and Medicaid over the next six years? The answer to that question is hotly debated. However, one thing is absolutely clear: both programs must definitely prepare--and in a relatively short amount of time--for the unprecedented demands of the baby-boom generation. Policies put into place over the next several years could provide necessary deficit reduction in the short term and start the restructuring essential for the longer-term program.

What, however, should those policies look like? The discussion of Medicare in these pages departs from the format used in earlier chapters. For example, instead of pinpointing individual policies and their associated savings estimates as stand-alone options, this chapter develops integrated packages of Medicare options that could achieve total six-year savings of $100 billion, $200 billion, and $300 billion. That approach highlights the trade-offs and interactions that policymakers must consider when folding detailed policies into a comprehensive Medicare proposal.

The Medicaid discussion in this chapter also takes a broad perspective on containing federal costs, reflecting the nature of policy debate over the past year. Rather than considering detailed options that might explicitly alter eligibility, coverage, or specific spending rules in Medicaid, this chapter addresses policies--block grants, per capita caps, and reductions in federal matching rates--that would alter the present fiscal relationship between federal and state governments.

I. Medicare

Medicare consists of two related programs: Hospital Insurance (HI), often referred to as Part A, which covers certain costs of hospital stays and other post-acute services; and Supplementary Medical Insurance (SMI), often referred to as Part B, which primarily pays for the services of physicians and other providers of outpatient health care. Over the past decade, Medicare spending has grown more quickly than every other major federal spending program except Medicaid. In 1996, Medicare will provide nearly $200 billion in benefits to 38 million elderly and disabled people.

Under current law, the Congressional Budget Office (CBO) projects that Medicare spending will soar to $332 billion by 2002 (see Table 6-1). That growth represents an average annual rate of increase of 8.9 percent --compared with the projected 4.8 percent growth in the economy over the same period.

HI benefits are financed primarily from payroll taxes paid by current workers and their employers. SMI benefits are financed primarily from general revenues, with beneficiaries paying a premium to cover some of the costs. SMI premiums are currently $42.50 a month, which covers only 25 percent of SMI costs. HI and SMI receipts are deposited in separate trust funds. The SMI trust fund has been adequately financed over its three decades of operation. The HI trust fund, however, has been nearing insolvency for some years, and the fund fell into deficit in 1995. Consequently, brightening the financial outlook for the HI trust fund has been a significant policy goal in recent years.

Most beneficiaries incur health care expenses in addition to their SMI premium. Both HI and SMI require cost sharing in the form of deductibles and coin-

Table 6-1.
Projections of Medicare Outlays, 1996-2002 (By fiscal year, in billions of dollars)

	1996	1997	1998	1999	2000	2001	2002	Average Annual Percentage Rate of Growth, 1996-2002
Hospital Insurance	127	139	152	164	177	190	204	8.2
Supplementary Medical Insurance	72	79	88	97	106	116	128	10.1
Gross Outlays	199	219	240	261	283	307	332	8.9
Premium Receipts	-20	-21	-23	-24	-25	-26	-27	5.1
Net Outlays	179	198	217	237	258	281	305	9.3

SOURCE: Congressional Budget Office.

surance. In addition, many beneficiaries face costs for services that Medicare does not cover, such as prescription drugs, physical examinations, hearing aids, dental care, and custodial care.

The major proposals to restructure Medicare and contain federal spending for the program have encouraged a shift by enrollees from traditional fee-for-service to health plans that are paid a fixed amount per enrollee, referred to as risk-based plans. Such plans, primarily health maintenance organizations (HMOs) under current law, agree to provide Medicare-covered services to each enrollee for a fixed monthly payment. A plan paid on that basis is "at risk," since it is responsible for the full costs of care for its enrollees and thus has an incentive to provide that care in an efficient manner. Risk-based HMOs typically cover all or part of Medicare's cost-sharing requirements and may provide additional services as well.

Table 6-2.
Projections of Medicare Benefits by Type of Service (By fiscal year, in billions of dollars)

	1996	2002	Average Annual Percentage Rate of Growth, 1996-2002
	Hospital Insurance		
Inpatient Hospital Services	84	115	5.4
Home Health Services	18	31	10.2
Health Maintenance Organizations	11	32	20.3
Skilled Nursing Facility Services	11	19	9.1
Hospice Services	3	6	14.6
Total Benefits[a]	126	203	8.3
	Supplementary Medical Insurance		
Physician Services[b]	35	46	4.7
Outpatient Hospital and Other Services[c]	17	35	12.5
Laboratory Services, Durable Medical Equipment, and Other Services[d]	10	19	12.5
Group Plans	8	25	20.5
Total Benefits	70	126	10.2

SOURCE: Congressional Budget Office.

a. Includes the impact of the Contract with America Advancement Act of 1996, enacted on March 29, 1996. That impact is not distributed in the components of Medicare benefits.

b. Includes payments by carriers to physicians and nonphysicians under the physician fee schedule.

c. Includes outpatient hospital services, laboratory services in hospital outpatient departments, hospital-provided ambulance services, and other services paid by intermediaries.

d. Includes independent and physician in-office laboratory services, durable medical equipment, ambulance services paid by carriers, and other services paid by carriers.

In contrast, traditional fee-for-service Medicare pays separately for each specific service provided to beneficiaries. As a result, providers have a financial incentive to increase the use of services. Beneficiaries in turn have little financial reason to refuse services that may be of some value since they pay only a fraction of the cost of those services. Moreover, most beneficiaries in the fee-for-service sector have some form of supplementary insurance that covers Medicare's cost-sharing requirements, making those requirements largely ineffective in discouraging the use of services. That supplementary insurance could be private ("medigap") coverage, employer-sponsored coverage for retirees, or Medicaid (for low-income beneficiaries).

CBO projects that the 9 percent of Medicare beneficiaries enrolled in risk-based plans in 1996 will jump to nearly 17 percent by 2002 under current law. Because of that shift, enrollment in the traditional fee-for-service sector is projected to wane somewhat. Even so, Medicare's payments to fee-for-service providers of home health, skilled nursing care, and outpatient hospital services are still projected to grow twice as fast as the economy (see Table 6-2 on page 417).

Alternative Approaches to Containing Medicare's Costs

Over the past decade, the Congress has attempted to slow the growth of Medicare spending primarily by limiting payment rates to fee-for-service providers. That policy met with some success during the 1980s, mainly by reducing the growth of spending for hospital services. But it has been less successful in the 1990s. Medicare spending has continued to mount at double-digit rates while the rate of growth of health care spending in the private sector has slowed considerably. Not surprisingly, that contrast between the experience of the private and public sectors has highlighted several approaches that Medicare could adopt to reduce the growth of federal outlays.

Private-sector employees increasingly enroll in health plans that can deliver care more efficiently than the fee-for-service system. Indeed, large employers have been far more aggressive than Medicare in offering a range of managed care plans, from HMOs to preferred provider organizations to point-of-service plans, that employ a variety of methods to reduce the excessive use of health services. Smaller employer-sponsored plans may offer only a managed care plan to their employees. As many as three-quarters of those covered by employer-sponsored health insurance are now enrolled in managed care plans. In addition, sharp competition among health plans is pushing down costs. Providers discount their prices to capture a larger share of the market. Indeed, many plans, including fee-for-service plans, are increasingly adopting managed care techniques to control costs.

Although reducing payments to fee-for-service providers is clearly necessary to slow the growth of Medicare spending, other policies would be more effective in sustaining lower spending rates over the long term. For example, such policies as broadening the range of plans that are paid on a risk basis, improving payment systems for both risk-based plans and the fee-for-service sector, and placing more direct financial responsibility on beneficiaries for their spending decisions on health care would promote greater efficiency in the delivery of care and sharpen competition among health plans. Such policies would also help ensure the continued availability of health care to growing numbers of beneficiaries (see Box 6-1).

Constrain Costs in Fee-for-Service Medicare

Efforts to constrain costs in Medicare's fee-for-service sector have traditionally focused on limiting growth in the prices of services. Policies that limit prices do not change the incentive for providers to offer more services, however, and may not effectively curb the growth in expenditures, which represent price times volume of services. Introducing new payment systems that limit spending, rather than prices, would be a more effective strategy. However, new payment systems are complex to design and take considerable time to put in place. Nonetheless, those more ambitious policies would provide a basis for containing costs in the long term in Medicare's fee-for-service sector.

Lower Annual Updates to Existing Payment Systems. The Health Care Financing Administration periodically adjusts Medicare's fee-for-service payments to reflect inflation or cost increases. But the Congress has

frequently enacted policies that update payment rates by less than increases in the relevant indexes of inflation. That approach of lowering annual updates is easy to carry out, but it accepts the sometimes perverse incentives that existing payment systems have created.

Not all of the savings that could be gained by slowing the growth of those annual updates would be realized. Physicians would be able to offset part of their potential loss in Medicare receipts by increasing the volume of services they provide to beneficiaries or by providing more services of a complex nature that earn higher Medicare payments. Such a response to the policy could offset as much as half of the potential savings from lowering the update.

Furthermore, if payment rates are too tightly limited, beneficiaries could encounter difficulties getting

Box 6-1.
Options to Reduce Growth in Medicare Spending

A variety of specific policy options could reduce the growth of Medicare spending over the 1996-2002 period and beyond. Those options would constrain costs in fee-for-service Medicare, increase savings from risk-based plans, or increase the amounts beneficiaries pay for their own care. The following policy options, discussed in more detail in subsequent sections of the chapter, could be included in a comprehensive Medicare proposal.

Constrain Costs in Fee-for-Service Medicare

Options to slow the growth of fee-for-service spending would set payment rates based on current payment methods or establish new payment methods that could spur greater efficiency in the fee-for-service sector. Specific options include:

- Lower annual updates for payments
- Institute new payment methods, including
  - Prospective payment
  - Bundling
  - Payment limits on high-cost medical staffs
  - Competitive bidding

Increase Savings from Risk-Based Plans

The current method of paying risk-based plans could be altered to increase Medicare's savings. Specific options include:

- Lower payment below 95 percent of the fee-for-service rate
- Institute new payment methods, such as
  - Breaking the link with costs in the fee-for-service sector
  - Competitive bidding

Potential savings from improved payment methods could be enhanced by taking steps to increase enrollment in risk-based plans. Specific options include:

- Lower fee-for-service spending
- Expand the range of eligible plans
- Overhaul enrollment procedures
- Permit cash rebates

Alternatively, Medicare's current structure, with the traditional fee-for-service sector accounting for 90 percent of enrollment, could be fundamentally transformed by providing a fixed payment for every beneficiary. This option would:

- Convert Medicare to a defined contribution plan

Increase the Financial Responsibility of Beneficiaries

Medicare spending could also be reduced by imposing more costs on beneficiaries. Specific options include:

- Increase cost sharing by
  - Deductibles
  - Copayments
- Raise premiums through
  - An across-the-board increase
  - Income-related premiums

care from some providers or might not be able to obtain certain services. Yet even a sizable cut in payment updates might not lead to such problems if private insurers were also trimming rate increases. In such a case, providers would not have better-paying alternatives to Medicare and would be unlikely to turn away Medicare business.

Institute New Payment Methods. Other options would replace existing payment systems with new approaches for establishing prices for individual services. Alternative payment methods may provide explicit incentives within a fee-for-service environment to control the volume and complexity of services--the prospective payment system (PPS) for inpatient hospital services being the preeminent example. That system pays a fixed amount for treatment delivered during an episode of care (defined as all services furnished during an inpatient stay) rather than for each service individually.

Prospective payment systems could be expanded to other services, such as those delivered through hospital outpatient departments, skilled nursing facilities, and home health agencies. But cost savings would depend on how those systems were designed. For example, more savings are likely if episodes of care are defined for payment purposes to encompass more fully the care needed to treat the patient's illness. A broad definition limits the provider's opportunity to shift necessary services outside the defined episode and then be paid on an individual fee-for-service basis.

Other options that could spur greater efficiency in the fee-for-service sector include:

- *Bundling post-acute care services, such as skilled nursing facility and home health care, into the hospital PPS.* This bundling option would cover only those skilled nursing facility and home health services provided immediately after a hospital stay.

- *Restraining Medicare payments to high-cost medical staffs* (that is, physicians in hospitals with a high volume of physician services per admission). Under this option, Medicare's payments to physicians on each hospital's medical staff could not collectively exceed a limit defined as a certain percentage above the national median. That measure would provide incentives for physicians on the medical staffs of hospitals to manage the volume and intensity of services they deliver to Medicare patients.

- *Shifting from administered pricing for services to more market-oriented methods.* Such methods would include competitive bidding and pricing based on negotiations with provider groups. In markets in which Medicare's current rates exceed those paid by other insurers, such approaches could allow Medicare to take advantage of its buying power to establish lower payment rates.

Although those options for new payments could take years to craft and fully establish, they would give providers incentives to economize. Such options could transform the operation of major sectors in fee-for-service Medicare, leading to lasting improvements in efficiency and long-term budget savings.

Increase Savings from Risk-Based Plans

The financial incentives of traditional fee-for-service Medicare encourage excessive use of covered services. Fixing the amount paid for each beneficiary's care, rather than for each service delivered, could prompt more efficient delivery of health care and rein in unnecessary use of services. But it could also lead to underprovision of care. Medicare's current payment to risk-based plans equals 95 percent of fee-for-service costs in each local area, adjusted for demographic and other characteristics of the plan's enrollees.

Plans paid a fixed amount per beneficiary have an incentive to enroll relatively healthy beneficiaries, who use fewer services than average. Because Medicare's current payment formula does not fully account for that "favorable selection" of enrollees, the federal government pays somewhat more for enrollees in risk-based plans than those enrollees would have cost in the fee-for-service sector (see Box 6-2).

A number of budget proposals in 1995 advocated broadening the scope of Medicare's risk-based program and limiting the growth of payments. The Balanced Budget Act of 1995, for example, would have expanded the array of risk-based plans to include a variety of managed care options, provider-sponsored networks, private low-deductible fee-for-service plans, and high-

deductible plans with medical savings accounts (MSAs).

Those proposals would have reduced Medicare's spending by setting lower payment amounts per enrollee than are projected under current law. If medical costs rose, the risk-based plans would have to absorb those extra costs. Undoubtedly, the plans would eventually pass on those costs to their enrollees as higher premiums or fewer services. Efficient health plans would be better able to maintain service levels without increasing costs for beneficiaries.

Although the fixed-payment approach offers incentives for risk-based plans to increase their efficiency, budget savings from this policy option depend primarily on reducing payment rates. Whether those plans do in fact become more efficient may be a secondary consideration in the short run, as long as beneficiaries have reasonable access to affordable health care. Nevertheless, the long-term success of developing a broader and more competitive risk-based program hinges on finding more efficient ways to deliver health services. Inefficient plans would probably not survive if payment rates were limited to low growth rates over a number of years. Efficient managed care plans could bolster their share of the Medicare market, but they would also be under pressure to trim costs.

Box 6-2.
Adjusting Payments for Favorable Selection

Medicare's current payment system for risk-based managed care plans is, by design, unrelated to the plan's cost of doing business. Instead, payment rates are tied to the cost of providing services in the fee-for-service sector, adjusted for the enrollee's age, sex, disability status, institutional status, Medicaid eligibility, and work status.

Those adjustments for health risk are crude, however, and do not completely account for variations in the cost of providing health care to people within the categories of payment. Risk-based plans have an incentive to market selectively to relatively healthy enrollees within each payment category, although the extent to which they actually do so is debatable. Moreover, relatively healthy beneficiaries may be more likely to enroll in such plans, since they typically do not have strong ties to a fee-for-service provider. Because the current payment formula does not adjust adequately for that favorable selection, Medicare does not share in the savings from more efficient managed care plans.

Forging better methods for adjusting payments to reflect the health status of enrollees and their use of services could improve Medicare's ability to realize program savings from managed care plans. Developing risk-adjustment methods is technically complex, however. Indeed, the past decade of research has failed to identify substantial improvements in those methods.

Two policy approaches could increase savings from risk-based plans under Medicare's current structure, which allows beneficiaries to remain in the traditional fee-for-service sector if they so choose. One approach would modify the current method of payment so that Medicare could retain more of the savings that are possible with efficient health plans. The other approach would increase enrollment in those plans, thus increasing the size of that potential savings. An alternative to those two approaches would provide a fixed federal payment for every Medicare beneficiary, in effect converting the entire program to a defined contribution plan.

Set Payment Rates. Even if adjustments for favorable selection remain crude, payment levels could be set to lower overall Medicare spending. Doing so, however, could erode the incentives for both health plans and beneficiaries to participate in Medicare's risk-based program.

The simplest alternative would lower Medicare's payment rate from 95 percent of fee-for-service costs to some lower percentage. That option might yield savings, but the growth of spending in the risk-based program would still continue to be tied to fee-for-service performance.

Breaking the link between costs in the fee-for-service sector and payments to risk-based plans would prune some of the inflation built into the current payment system and produce program savings. One option would be to set the rate of growth of risk-based payments equal to an external factor, such as the rate of growth of the overall economy. Such an indexing method would allow spending in the risk-based program to grow only as quickly as the country's overall

ability to pay for that spending. Total Medicare spending would continue to grow faster than the economy, however, unless additional steps were taken to limit spending in the traditional fee-for-service sector.

Alternatively, one could replace the nationally uniform annual update to the payment rate with updates that reflect local market conditions. For example, counties having below-average payment levels would be given higher updates, which could encourage more plans in those counties to participate in Medicare.

A disadvantage of that general approach is that arbitrarily limiting the growth of risk-based payments over several years could result in rates that were either too high or too low. Payments that were higher than necessary would mean that Medicare would forgo some of the savings possible through managed care and keep some less efficient plans in Medicare. Payments that were too low could drive even some efficient plans out of the program and would lose some potential savings as a result. Enrollment in risk-based plans could also drop if payment rates were set too low and plans placed greater limits on services, since beneficiaries would have the option to return to the less restrictive traditional fee-for-service sector. In both cases, payment levels would not automatically adjust to changing conditions in the health care market. Additional policy actions would be required to achieve that effect.

To avoid such problems, Medicare could adopt competitive bidding and other alternatives to administered pricing that would tie payment rates more directly to market conditions. But bidding would be workable only in areas having a number of Medicare risk-based plans. Moreover, although research on alternative pricing methods has been undertaken, Medicare as yet has no operating experience with such methods.

Increase Enrollment. Risk-based managed care plans offer advantages for many Medicare beneficiaries, but such plans hold a far smaller share of the Medicare market than they do of the private insurance market. Expanding enrollment in risk-based plans and increasing the number of plans participating in the risk-based program have long been Medicare policy goals. Reducing the growth of payments to those plans could, however, hamper progress toward those goals.

From the beneficiary's perspective, one of the major advantages of risk-based plans is that they generally offer benefits beyond the basic Medicare package. Extra benefits--such as coverage for prescription drugs and nominal cost-sharing requirements--may be offered for no (or a reduced) additional premium. If Medicare took steps to retain more savings from risk-based plans, enrollees would probably have to pay more than they currently do for the extra benefits, which would discourage enrollment. Therefore, to retain savings while expanding enrollment, policymakers should consider other options that would make the risk-based program more attractive to health plans and beneficiaries. Such options include:

- *Establish policies to lower fee-for-service spending in Medicare.* That action would reduce payments to providers or increase costs to beneficiaries in fee-for-service Medicare. Providers, and in particular physicians, might respond by shifting their practices to risk-based plans. Beneficiaries might then follow their physicians to the new plans, especially if they also faced higher out-of-pocket costs in the fee-for-service sector.

- *Expand the array of risk-based plans to include a range of managed care and private fee-for-service options.* Beneficiaries would be better able to find plans meeting their preferences if the range of options were expanded, although doing so would also increase the possibilities for favorable selection. Expanding plan options in Medicare could, moreover, raise a variety of regulatory issues, such as solvency requirements for new types of health plans, quality of care standards, and antitrust considerations.

- *Overhaul Medicare's enrollment procedures.* Although beneficiaries are given a list of risk-based plans operating in their local area, they may be hindered in choosing a plan because they lack access to a source of information that compares the features of those plans. Moreover, most beneficiaries are automatically enrolled in fee-for-service Medicare on first gaining eligibility and can only enroll in a risk-based plan later. Only new enrollees who were already in a Medicare-certified plan may continue in that plan in a seamless fashion. One op-

tion would be to institute a coordinated open-enrollment process similar to that of the Federal Employees Health Benefits Program, with beneficiaries selecting from all health plans operating in their area. Beneficiaries would receive information about all plans regarding costs, access to providers, additional benefits that might be available, and other factors.

- *Allow risk-based plans to offer beneficiaries cash rebates as well as extra benefits.* Risk-based plans now compete only on the basis of coverage and quality of services. Plans could also compete for enrollment on the basis of price under this option. Plans would be less likely, however, to offer cash rebates or extra benefits if payment rates were limited.

Convert to a Defined Contribution Plan. The payment and enrollment options discussed above assume that Medicare's current structure, with both a traditional fee-for-service sector and risk-based plans, would remain intact. Options that would increase program savings from risk-based plans are thus limited to only a part of total Medicare spending. The traditional fee-for-service sector, with its open-ended claim on federal payments, would continue to drive the growth of Medicare spending. A more ambitious option would provide a fixed payment for every beneficiary, in effect converting the entire Medicare program to a defined contribution plan.

Under that option, beneficiaries could enroll in any health plan, with Medicare's contribution set at a fixed amount per beneficiary. The traditional fee-for-service program would become one of the health plans competing for Medicare beneficiaries. Beneficiaries who chose lower-cost plans might pay no more than they do now. But each beneficiary would be liable for the full additional cost of selecting a plan that cost more than Medicare's payment. Beneficiaries enrolling in traditional Medicare could be required to pay such a surcharge under a defined contribution plan.

A defined contribution plan that eliminated the special status of Medicare's fee-for-service sector would only be practical if beneficiaries had more than one plan from which to choose. Policy changes such as those discussed earlier would be needed to enhance the participation of health plans, and policymakers would have to address the problem of favorable selection. Oversight might be needed to ensure that each health plan met an acceptable level of quality and services. But the federal government's experience in running a successful health insurance program for its employees based on defined contribution principles could be useful in establishing the mechanics of such a system for Medicare. (See Chapter 7 for estimates of the long-term savings that might accrue under this type of defined contribution option.)

Even under a defined contribution option, the central policy issue facing Medicare remains to be resolved: what is the proper balance between slowing the growth of federal spending and ensuring access to health care for beneficiaries? Methods of setting the amount of the government's contribution would have to be developed to reflect that balance. If that contribution was tied to the cost of providing a basic package of services, this option would not guarantee a specific stream of budget savings in future years but could ensure wide access to services. If the government's contribution was set independently of health care costs, program savings could be guaranteed but not the level of benefits.

Increase the Financial Responsibility of Beneficiaries

Medicare savings could be achieved by imposing additional program costs on beneficiaries through higher cost-sharing requirements and premiums. Such options would push up the cost of Medicare for most beneficiaries, who would either make higher out-of-pocket payments or pay higher premiums for their supplementary insurance. Under current law, beneficiaries who are eligible for Medicaid would be protected.[1] Both state and federal governments would share the additional Medicare costs for those people.

1. All Medicare beneficiaries with incomes of less than 120 percent of poverty are now eligible to have Medicaid pay their Supplementary Medical Insurance premium. All of those with incomes of less than 100 percent of poverty are eligible for coverage of Medicare's cost-sharing requirements as well, and some are eligible for additional Medicaid benefits.

Increase Cost Sharing. Higher deductibles and copayments would shift some of the cost of services to beneficiaries, yielding immediate savings for Medicare. But across-the-board increases in cost-sharing requirements are unlikely to discourage the use of services by most beneficiaries, whose supplementary insurance provides first-dollar coverage for the cost of care. (Medigap premiums would, however, increase to reflect the additional cost sharing.) Greater cost sharing could persuade some beneficiaries to enroll in risk-based managed care plans to avoid higher out-of-pocket costs in the fee-for-service sector. The additional out-of-pocket costs could, however, discourage some low-income beneficiaries who are not eligible for Medicaid from seeking needed care.

Alternative approaches could minimize the impact of increased cost sharing on those beneficiaries. SMI coinsurance could be raised, for example, to 25 percent for the first $1,000 of services used by each beneficiary during the year and reduced to the current 20 percent level beyond that. Cost sharing could also be extended to home health services, which are free of such requirements. A fixed copayment, such as $5 for a home health visit, could be imposed. Moreover, copayments might be applied only to the first several visits in an episode of care to avoid overburdening those who need more services.

Raise Premiums. A premium increase could be carried out in several ways. The simplest would uniformly raise the SMI premium for all beneficiaries. But such an approach could impose financial hardship on some low-income beneficiaries who are not also eligible for Medicaid.

Premiums could instead be set to increase with the incomes of beneficiaries, rising to equal the full cost of SMI for upper-income beneficiaries. An income-related premium was included in several 1995 budget proposals, marking a sharp break with traditional concerns that such policies would turn Medicare into a welfare program. The potential for savings from an income-related premium is limited, however, since most beneficiaries have modest incomes. Large savings could only be obtained by setting the income thresholds for additional premiums at low levels.

Illustrative Budget Packages

Policymakers must weigh several broad considerations when combining Medicare options into an integrated budget package. How much should Medicare be expected to contribute to deficit reduction over the next six years and in the long run? How should budget reductions be allocated between beneficiaries and providers, and between the fee-for-service sector and managed care plans? How should specific policies be phased in over time? Each of those issues is more a matter of judgment than analysis. Nonetheless, any analysis of Medicare budget options would be incomplete without considering how the individual options could be packaged together and what the total impact of those packages might be.

The following discussion covers how policy options might be combined to meet three alternative savings targets: $100 billion, $200 billion, and $300 billion in Medicare savings between 1997 and 2002. Specific budget packages that would achieve the first two savings targets are presented below, along with a general discussion of what may be required to meet the third target. The specific budget packages that are discussed are illustrative only; numerous other packages could be designed to meet the same savings targets (see Box 6-3).

Box 6-3.
Options to Increase Medicare Revenues

This chapter emphasizes policy options that would reduce Medicare spending rather than those that would increase program revenues. Even without policy change, Medicare automatically draws on general revenues as program costs increase in Supplementary Medical Insurance.

One revenue option would raise the payroll tax for Hospital Insurance by 0.4 percentage points from its current level of 2.9 percent of taxable earnings. Hospital Insurance revenues would climb by about $100 billion over the next six years under this option. (Doubling the percentage increase in the payroll tax rate would approximately double the additional revenue collected.) Although revenue enhancements could help reduce budget deficits, such options would do nothing to slow the growth of spending that threatens Medicare's stability over the long term.

The $100 billion and $200 billion savings targets bracket the Medicare savings amounts that would be achieved by the Administration and the Congress, respectively, for the 1997 budget. The budget packages that are discussed do not, however, include all of the specific policies that would probably be proposed in a full budget proposal. For example, all of the fee-for-service options presented below reduce payment updates. Excluded from the options, however, are more complex policies that would introduce prospective payment or bundling methods or otherwise alter the way Medicare covers services. This simplified presentation focuses more directly on the overall impact of policies on providers and beneficiaries and does not imply a judgment about the appropriateness of any specific option.

Payments for benefits in the fee-for-service sector dominate Medicare's spending between 1997 and 2002, accounting for about $1.4 trillion of the nearly $1.5 trillion cumulative outlays for Medicare benefits (net of premiums) projected over that period (see Table 6-3). The $100 billion savings package relies primarily on reductions in payments to fee-for-service providers, with 85 percent of the cumulative savings coming from that source. The $200 billion savings package would substantially increase the amount of savings from risk-based plans and beneficiaries. Even with the sizable savings from those sources, however, fee-for-service reductions would still account for almost 70 percent of the total. Actual Medicare budget packages would be unlikely to have the same distribution of savings as the packages discussed here, but the comparison highlights how important reducing fee-for-service expenditures would be in limiting the growth of Medicare spending.

Substantial latitude exists in selecting options to meet a modest level of Medicare savings. As the level of desired savings increases, however, heavy reliance on customary fee-for-service options (such as limiting payment updates) may become unrealistic. Across-the-board tightening of prices in the fee-for-service sector could produce a price structure that does not reflect underlying conditions of supply and demand for specific services. At some point, beneficiaries in some areas might find that they no longer had access to some medical services in the traditional fee-for-service sector.

The discussion of the $300 billion savings target underscores the challenges of meeting a more ambitious deficit reduction goal and the magnitude of reductions in provider payments that could be involved. Balanced approaches, which place more emphasis on savings from an expanded risk-based sector and greater contributions from beneficiaries, may be more successful in meeting ambitious savings targets while ensuring access to health care.

Six-Year Savings Target: $100 Billion

The illustrative policy package that would produce savings of $100 billion over the next six years includes options that would lower payment updates in the fee-

Table 6-3.
Budgetary Impact of Illustrative Medicare Packages, 1997-2002 (In billions of dollars)

	Six-Year Cumulative Total: $100 Billion Package	Six-Year Cumulative Total: $200 Billion Package
Current Law		
Fee-for-Service Benefits	1,388.3	1,388.3
Risk-Based Payments	230.5	230.5
Total Premium Receipts[a]	-145.9	-145.9
Total	1,472.9	1,472.9
Changes in Outlays		
Fee-for-Service Reductions	-86.0	-132.7
Risk-Based Plan Savings	-10.4	-18.6
SMI Premium Revenues[b]	-4.9	-45.1
Total	-101.2	-196.4
Post-Policy		
Fee-for-Service Benefits	1,302.3	1,255.6
Risk-Based Payments	220.1	211.9
Total Premium Receipts[a]	-150.8	-191.0
Total	1,371.7	1,276.5

SOURCE: Congressional Budget Office.

NOTE: SMI = Supplementary Medical Insurance.

a. Includes Hospital Insurance and SMI premiums.

b. Policies would increase SMI premiums only.

Table 6-4.
Illustrative Medicare Savings Options: Scenario I--$100 Billion Savings Target, 1997-2002

Savings from Current-Law Spending	Annual Savings (Billions of dollars)						Six-Year Cumulative Total
	1997	1998	1999	2000	2001	2002	
Reduction in Payments to Providers in Traditional Medicare							
Hospital[a]	1.6	4.0	6.6	9.4	12.3	15.4	49.3
Home health	0.7	1.1	1.3	1.4	1.5	1.6	7.6
Skilled nursing facility	0.3	0.5	0.6	0.6	0.7	0.7	3.4
Physician	0.4	1.5	2.7	3.7	4.2	4.4	17.0
Clinical laboratory	0.3	0.5	0.7	0.8	1.0	1.2	4.5
Durable medical equipment	0.2	0.4	0.6	0.8	1.0	1.2	4.2
Subtotal	3.5	8.0	12.4	16.7	20.7	24.6	86.0
Risk-Based Health Plans[b]	0.3	0.4	1.1	1.9	2.8	3.9	10.4
SMI Premium Revenue[c]	-0.3	-0.6	-0.2	0.7	1.9	3.4	4.9
Total Medicare Savings	3.5	7.8	13.3	19.3	25.4	31.9	101.2

SOURCE: Congressional Budget Office.

NOTE: SMI = Supplementary Medical Insurance.

a. Includes $0.6 billion from interactions with Hospital Insurance premiums.

b. Risk program expanded to additional types of plans.

c. Basic SMI premium increased to 25 percent of SMI costs.

for-service sector, encourage the growth of enrollment in risk-based plans, and freeze SMI premiums at 25 percent of SMI costs. That policy package would save a total of $101.2 billion between 1997 and 2002 (see Table 6-4). The savings level is consistent with the general level of stringency proposed in legislation over the past five or six years.

Savings from Fee-for-Service. Most of the savings in the first budget scenario would come from lowering the growth of payments to fee-for-service providers--$86 billion over six years. The options described below represent only some of the specific policies that could be enacted to meet the savings target.

Three policies represent HI savings options. Growth in total hospital outlays would be held to 2.9 percent a year compared with 5.4 percent a year under current law. Reducing the cost limits for home health agencies and skilled nursing facilities would also generate savings.

Another three policies would achieve SMI savings. Fees would be set so that overall physician spending would grow by only 1 percentage point more than the growth in real gross domestic product (GDP) per capita. The conversion factor used to determine payments to physicians for individual services would decline from its 1996 level of about $36.[2] In 2002, that factor would drop to $27 under the $100 billion savings scenario compared with $33 under current law. Payment increases for clinical laboratory services and durable medical equipment would also be curtailed under this scenario.

2. The physician fee schedule uses separate conversion factors for primary care services and other physician services. The conversion factor reported here is a weighted average of those separate factors.

Numerous combinations of policies could generate similar savings. The choice of specific policies would determine how the reduction in payments was distributed within a provider group (for example, between urban and rural hospitals, or between surgical and medical physician specialties), among provider groups (such as between hospitals and physicians), and between the HI and SMI trust funds. If reductions in payments to one provider group were considered too austere, the savings target could be achieved by offsetting smaller reductions in payments to that group with greater cuts in updates for other providers.

CBO calculated the reductions in hospital spending, for example, by updating PPS operating payments by 4 percentage points less than the hospital market basket. Those savings could also be achieved by combining a lighter reduction in the PPS update with heavier reductions in:

- Payments to hospitals for their inpatient capital-related costs;
- Payments for graduate medical education;
- Payments to PPS-exempt hospitals, which include rehabilitation hospitals and long-term care hospitals;
- Disproportionate share payments to hospitals serving high percentages of low-income people; and
- Payments for services provided by hospital outpatient departments.

Compared with a policy that relied solely on reducing the PPS update factor, those alternative policies would shift the effects of payment reductions among hospitals, depending on the type of hospital and its mix of patients and services.

A different mix of policies in the budget scenario could also change how much of the savings would come from HI and how much from SMI. Savings from HI, the larger of the two parts of Medicare, amount to about $60 billion over six years, whereas SMI savings (not counting the premium) yield about $26 billion. Shifting the balance toward greater HI savings would help shore up the HI trust fund. Shifting the balance toward SMI savings would help to reduce the premium in this scenario, which sets the premium at 25 percent of SMI costs. Both of those issues are discussed more fully below.

Savings from Risk-Based Plans. The $100 billion savings scenario would expand the scope of Medicare's risk-based program to include a broader array of plans and improve the enrollment process. Payments to risk-based plans would still, however, be tied to fee-for-service costs. Hence, savings would occur only because the fee-for-service policies lower costs in that sector. That decline in risk-based payments relative to current law would yield $10.4 billion in savings between 1997 and 2002.

The proportion of Medicare beneficiaries who enroll in risk-based plans would increase with the broader range of plan choices and the annual open-enrollment process that this package of policies would institute. CBO projects that enrollment in risk-based plans would reach 25 percent of the Medicare population by 2002. That amount compares with projected enrollment of 17 percent of the Medicare population in 2002 under current law.

Premiums. Setting the SMI premium equal to 25 percent of program costs would yield less than $5 billion in program savings between 1997 and 2002. Under current law, the premium would remain at 25 percent of costs through 1998. After that, annual percentage increases in SMI premiums would be limited to no more than the cost-of-living adjustment made to Social Security benefits each year.

Policies that reduce SMI outlays also reduce premium levels, at least if premiums are set as a percentage of those outlays. In 1997 and 1998, the premium policy under the first budget scenario would remain unchanged from current law. As Table 6-4 shows, a small amount of premium revenue is lost in those years because other policies would lower SMI outlays. Premium revenue would increase over current-law levels only after 1999.

CBO projects that the monthly premium under the $100 billion savings scenario would drop by $0.90 in 1997 and by $1.80 in 1998 compared with current law (see Table 6-5). After 1999, the monthly premium would increase faster than under current law. By 2002, the premium would reach $63.50, or $8.80 a month

more than the premium would have been without legislation.

Trust Fund Status. HI trust fund receipts fell below outlays in 1995, for the first time in nearly a quarter century. Previously, the HI trust fund fell into deficit only in calendar year 1971. Reductions in HI outlays in the $100 billion savings scenario would help to stem, but not eliminate, the net outflow of funds over the next six years (see Table 6-6). According to CBO projections, the trust fund will become insolvent in 2001 under current law and in 2002 under the $100 billion savings scenario.

Policies could be adopted to improve the financial outlook of the HI trust fund within the context of a $100 billion savings target. Some of those policies could lower net federal spending and thus help to reduce the deficit. For example, deeper reductions could be made in payments to HI providers. Equity considerations might arise, however, if larger cuts were made in hospital spending without further curbing payments to physicians. Increasing HI trust fund revenues by increasing the HI payroll tax or earmarking other funds for the trust fund would also contribute to trust fund solvency. Those options would, however, do nothing to slow the growth in Medicare spending.

Shifting services out of HI would also improve the solvency of the trust fund, but that improvement would be purely a bookkeeping transaction and would not improve Medicare's overall financial outlook. Shifting services out of HI would permit the federal government to pay for those services after the HI trust fund becomes insolvent. Some analysts argue that this shift would be necessary to preserve the entitlement of beneficiaries to those services.

Medicare proposals for the 1996 budget included two such options: a shift of some home health services from HI to SMI, without a corresponding increase in the SMI premium and with no new cost-sharing requirements; and a shift of payments to teaching hospitals from HI to a separate trust fund outside the Medicare account. In the first case, home health services would have been paid completely out of general revenues, with no actual reduction in overall Medicare outlays. In the second case, an increase in other federal outlays would have offset the corresponding reduction in Medicare outlays.

Although the HI trust fund has considerable symbolic value as an indicator of the fiscal health of Medicare, achieving trust fund solvency would only partially resolve the program's financing problems. Growth in

Table 6-5.
Projections of SMI Monthly Premiums (By calendar year, in dollars)

	1996	1997	1998	1999	2000	2001	2002
Current Law	42.50	44.40	48.70	50.20	51.70	53.20	54.70
$100 Billion Savings Scenario	42.50	43.50	46.90	50.10	54.00	58.30	63.50
$200 Billion Savings Scenario							
Basic	42.50	54.20	57.70	60.90	64.90	69.40	75.20
Income-related (Maximum)	n.a.	117.86	125.47	132.43	141.13	150.92	163.53

SOURCE: Congressional Budget Office.

NOTE: SMI = Supplementary Medical Insurance; n.a. = not applicable.

total Medicare spending is a far better indicator of the challenges facing policymakers.

Six-Year Savings Target: $200 Billion

Doubling the amount of Medicare savings to $200 billion over the next six years would require further reductions in payment updates to fee-for-service providers. The second budget scenario also would scale back payments to risk-based plans and limit their payment updates to the rate of growth of GDP, rather than the more rapid growth of fee-for-service costs. Taking all of the additional savings from providers is probably unrealistic, however. The second budget scenario also assumes a substantial increase in premiums paid by beneficiaries by linking the premium rate to the amount of their incomes. Total Medicare savings between 1996 and 2002 are estimated to be $196.4 billion (see Table 6-7).

Savings from Fee-for-Service. Lower spending in the fee-for-service sector accounts for $133 billion in savings under the $200 billion savings scenario. Although that increase is sizable compared with the first scenario, fee-for-service options would yield a lower share of total savings.

Savings levels would jump between 50 percent and 75 percent in each major fee-for-service spending category between the $100 billion and $200 billion savings scenarios. Total hospital outlays would grow by 1.7 percent a year. Updating PPS operating payments by 6 percentage points less than the hospital market basket could achieve that much of a slowdown. Alternatively, a smaller reduction in the PPS operating payment up-

Table 6-6.
HI Trust Fund Status (By fiscal year, in billions of dollars)

	1996	1997	1998	1999	2000	2001	2002
Current Law							
Income	120	126	131	135	140	143	146
Outlays	127	139	152	164	177	190	205
Surplus	-7	-13	-21	-29	-37	-47	-58
End-of-Year Balance	122	109	88	59	22	-25	-83
$100 Billion Savings Scenario							
Income	120	127	131	136	142	146	151
Outlays	127	137	146	155	165	175	185
Surplus	-7	-10	-15	-19	-23	-29	-34
End-of-Year Balance	122	112	97	78	55	27	-8
$200 Billion Savings Scenario							
Income	120	127	131	137	142	148	153
Outlays	127	136	144	152	159	166	174
Surplus	-7	-9	-13	-15	-17	-19	-21
End-of-Year Balance	122	113	101	86	69	51	30

SOURCE: Congressional Budget Office.

NOTE: HI = Hospital Insurance.

date could be combined with reductions in other components of Medicare hospital spending. In addition to lower cost limits for home health and skilled nursing facility services than under the $100 billion savings scenario, rate reductions would be instituted as part of a transition toward prospective payment for both of those services.

Growth in payments for SMI services would also be sharply curbed under the $200 billion savings scenario. Fees would be set so that overall physician spending would grow by 1 percentage point less than the growth in real GDP per capita--a drop of 2 percentage points from the $100 billion savings scenario. The conversion factor for the fee schedule would drop from $36 in 1996 to $33 in 2002 under current law, and to $22 under the $200 billion savings scenario. Payments for clinical laboratory services and durable medical equipment would also be lowered initially, and annual updates would be reduced under this scenario.

As discussed earlier, a different mix of policies could achieve the fee-for-service savings in this budget scenario. However, the range of possibilities is more limited than under the first scenario given the higher level of fee-for-service savings required here. Lowering the hospital reductions by $10 billion, for example, might be justified, but finding additional policies to replace that amount of savings could be difficult.

Table 6-7.
Illustrative Medicare Savings Options: Scenario II--$200 Billion Savings Target, 1997-2002

Savings from Current-Law Spending	Annual Savings (Billions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
Reductions in Payments to Providers in Traditional Medicare							
Hospital[a]	2.5	6.1	9.9	13.8	18.0	22.2	72.4
Home health	0.7	1.1	1.3	1.8	2.6	3.0	10.5
Skilled nursing facility	0.3	0.5	0.6	1.0	1.6	2.0	6.1
Physician	0.4	2.0	4.5	6.6	8.1	9.1	30.7
Clinical laboratory	0.4	0.9	1.0	1.2	1.5	1.7	6.8
Durable medical equipment	0.4	0.7	0.9	1.1	1.4	1.7	6.2
Subtotal	4.8	11.3	18.1	25.5	33.2	39.8	132.7
Risk-Based Health Plans[b]	0.5	1.2	2.2	3.3	4.7	6.6	18.6
SMI Premium Revenue							
Basic premium[c]	3.0	3.8	4.3	5.3	6.6	8.4	31.3
Income-related premium	0.4	1.9	2.2	2.6	3.1	3.6	13.8
Subtotal	3.4	5.7	6.5	7.9	9.7	12.0	45.1
Total Medicare Savings	8.7	18.2	26.8	36.7	47.6	58.4	196.4

SOURCE: Congressional Budget Office.

NOTE: SMI = Supplementary Medical Insurance.

a. Includes $0.9 billion from interactions with Hospital Insurance premiums.

b. Risk-based program expanded to additional types of plans and payment growth linked to gross domestic product.

c. Basic SMI premium increased to 31.5 percent of SMI costs.

Savings from Risk-Based Plans. In addition to expanding the scope of Medicare's risk-based program and improving the enrollment process, the $200 billion savings scenario would make major changes in the way risk-based plans were paid. Risk-based payments would no longer reflect only fee-for-service costs in their locality, but instead would be a blend of local and national rates. Payments would also be scaled back by eliminating extra payments related to the use of teaching hospitals and disproportionate share hospitals.

Limiting payment updates to the rate of growth of GDP each year would sever the link between payment rates for risk-based plans and costs in the fee-for-service sector. Thus, the average risk-based payment per enrollee would grow by 4.9 percent a year rather than the 7.6 percent a year projected under current law. Those changes in payment policy yield $18.6 billion in savings from risk-based plans between 1997 and 2002 (see Box 6-4).

CBO projects the same increase in enrollment in risk-based plans under both the $100 billion and $200 billion savings scenarios. The broader range of plan choices and the annual open-enrollment process would increase enrollment in risk-based plans to 25 percent of the Medicare population by 2002. Enrollment in risk-based plans under the $200 billion savings scenario would eventually grow more slowly than under the first scenario, however, because of differences in payment policies. Although the average payment per beneficiary would increase by about 5 percent a year over the next six years in both the risk-based and fee-for-service sectors, payment updates would ultimately be lower for risk-based plans than for fee-for-service providers. Slower growth in risk-based payments could hinder the ability of those plans to offer extra benefits or other enrollment inducements.

Premiums. The $200 billion savings scenario contains two premium policies that together would increase revenues by more than $45 billion between 1997 and 2002. Every beneficiary would face a basic premium equal to 31.5 percent of SMI costs, thereby producing additional revenues of $31.3 billion over six years. An additional premium would be levied on individuals with

Box 6-4.
Stacking Order and the Savings from Risk-Based Plans

When policies that would reduce spending on the same group of services are included in a budget package, the order in which the estimates for those policies are made --the stacking order--can alter the apparent effectiveness of each policy. That is, the share of savings projected under each policy could differ depending on the stacking order, even though the savings estimated for the entire budget package would remain unchanged.

For example, the package of options under the $200 billion savings scenario would expand enrollment in risk-based plans (and correspondingly lower enrollment in fee-for-service plans), limit the growth in payments to risk-based plans, and lower payments to fee-for-service providers. The Congressional Budget Office estimates savings from fee-for-service options first using the current-law levels of enrollment in fee-for-service Medicare. Savings from those fee-for-service options include spending reductions on behalf of beneficiaries who would ultimately be enrolled in risk-based plans. However, that calculation exaggerates the savings from fee-for-service reductions and minimizes the savings from risk-based plan options.

Alternatively, one could reverse the estimate's stacking order. However, doing so would exaggerate the estimated savings from risk-based plans, since the expected growth of enrollment in risk-based plans above current-law levels would be taken into account first. The estimate assumes that beneficiaries (and expenditures) would shift from the fee-for-service sector before payments were reduced in that sector. Therefore, estimated savings from fee-for-service providers would fall, and estimated savings from the expanded risk-based program would rise by an equal amount. Indeed, if one uses that alternative stacking order, savings from risk-based plans would increase by almost $18 billion to a six-year total of $36 billion, and savings from fee-for-service options would decline by the same amount.

Although the change in the stacking order does not affect total savings for the policy package or the actual contribution of each policy option to those savings, the stacking order does alter the apparent effectiveness of fee-for-service and risk-based plan options. There is, however, no single correct way to display the savings estimated for policy options that interact in that fashion.

income greater than $50,000 and couples with income greater than $75,000 a year. (Income thresholds would not be indexed for inflation under this option.) The additional premium would rise with income. Consequently, the basic and additional premiums combined would reach a level equal to 100 percent of SMI costs for individuals with income of $100,000 or more and couples with income of $150,000 or more a year. That income-related premium would yield $13.8 billion in additional revenues over the next six years.

The basic premium level in this scenario is identical to the 1995 proposal by the Congress to freeze premiums at the then-prevailing 31.5 percent level. If the 31.5 percent premium had been enacted in 1995, the premium increase in 1996 would have been fairly modest compared with 1995 premium amounts. If that premium option was enacted this year, however, the premium increase in 1997 would be a sizable hike over the 1996 premium, which slipped to 25 percent of SMI costs.

Under the $200 billion savings scenario, more than 90 percent of the 37 million Medicare beneficiaries would pay only the basic premium of $54.20 a month in 1997. That basic premium would rise to $75.20 by 2002--an increase of $20.50 compared with current law. About 2.8 million beneficiaries in 1997 would pay an additional premium amount, although only about 600,000 would pay the maximum premium. On average, the remaining beneficiaries would pay $39 a month in addition to the basic premium in 1997.

The larger basic premium under this budget scenario would raise the costs of state Medicaid programs, which pay the premiums and cost-sharing requirements for people who are eligible for both Medicare and Medicaid. CBO estimates that total Medicaid spending would increase by about $4.4 billion between 1997 and 2002 because of higher Medicare premium payments. Of that amount, about $2.5 billion would represent additional costs to the states.

Trust Fund Status. The more aggressive cost cutting called for under the $200 billion savings scenario would contribute only modestly to the solvency of the HI trust fund. HI outlays would diminish by $89 billion compared with current law during this period, extending the trust fund's date of insolvency to 2004.

Six-Year Savings Target: $300 Billion

A six-year savings target of $300 billion would represent a sharp break with past Medicare policies. Reductions in payment updates in the traditional fee-for-service sector needed to meet this target would be draconian. Payment growth for risk-based plans would also be slashed. Moreover, beneficiaries would probably find their own costs rising substantially.

Yet, as Chapter 7 explains, spending reductions on this order of magnitude might become inevitable as demand for Medicare-covered services skyrockets with the aging of the baby-boom generation. Policies adopted in the next few years could lay the groundwork for addressing the long-term financing crisis. Such policies would encourage greater efficiency in delivering services, as well as more realistic expectations on the part of providers and beneficiaries about Medicare's ability to finance those services.

Increasing the second scenario's savings options by 50 percent gives a sense of how deep the spending reductions could be under a $300 billion savings target. The PPS hospital update would drop by about 9 percentage points rather than by 6 percentage points. That policy would lead to an actual reduction in hospital payments rather than a slowing in the rate of growth as under the $200 billion savings scenario. By 2002, Medicare spending for hospital services would fall just below the 1996 spending level--even though the number of beneficiaries would grow by 8 percent over the same period.

Overall physician spending would grow by 3 percentage points less than the growth of real GDP per capita--a drop of 2 percentage points from the $200 billion savings scenario. Since real GDP per capita is projected to grow by about 4 percent a year, that drop implies that Medicare spending on physician services would decline by $2.5 billion between 1996 and 2002. By 2002, the conversion factor that the physician fee schedule uses to determine payments for individual services would plummet to half its 1996 value.

Even those reductions in Medicare spending for hospital, physician, and other services in the fee-for-service sector would be insufficient to meet the $300 billion savings target. Average payments to risk-based

health plans would also have to be pared compared with the $200 billion savings scenario. In addition, the costs to beneficiaries would rise by $20 billion. That jump is equivalent to raising the base SMI premium to almost 40 percent of SMI costs while retaining the income-related premium.

A $300 billion savings target met in this way would reduce growth in Medicare spending per enrollee to 2.2 percent a year between 1996 and 2002. With the number of beneficiaries growing at 1.3 percent a year over this period, those policies would allow total Medicare spending to increase by about $45 billion, representing an average aggregate growth rate of 3.5 percent a year.

To meet the $300 billion savings target, the decrease in revenues to providers and the increase in costs to beneficiaries would need to be substantial and could have broad repercussions. Access to particular providers and services plus the overall quality of care in Medicare might be threatened, unless the private health market also operated under tight payment limits imposed by insurers. Heftier costs to beneficiaries might cause some people to drop their SMI coverage to save on premium payments. If higher cost-sharing requirements were part of the policy package, other beneficiaries might be discouraged from getting necessary care because of higher out-of-pocket costs. Medicaid costs could also increase sharply if Medicare premiums and cost-sharing requirements were raised substantially. Moreover, states might seek additional authority to limit those costs by restricting standards for Medicaid eligibility.

Those potentially dire consequences of a tight Medicare budget are not, however, inevitable. The policy challenge is to balance the need to control federal Medicare spending with the need to maintain reasonable access to care. Nontraditional approaches to the pricing and delivery of care, such as broadening the range of eligible health plans, competitive payment methods, or converting to a defined contribution system, could lead to a necessary transformation of the Medicare program. If beneficiaries and providers accepted the lower spending levels as a permanent feature of Medicare rather than as a temporary problem, they would also be more likely to accept the need for that transformation. Such a process could be an orderly one--if it was given enough lead time.

II. Medicaid

The Medicaid program, established under title XIX of the Social Security Act, is the nation's major program providing medical and long-term care services to low-income populations. In recent years, the program's expenditures have soared dramatically, representing a growing share of the federal budget: for example, between 1990 and 1995, federal Medicaid spending grew at an average annual rate of almost 17 percent. In fiscal year 1996, the federal government will spend $96 billion on Medicaid--about 6 percent of all federal outlays. Under current law, CBO projects that federal Medicaid expenditures will rise to $166 billion by 2002, accounting for almost 8 percent of federal outlays in that year (see Table 6-8).

Slowing the rate of growth of Medicaid spending has, therefore, become an important component of any effort to balance the federal budget. Because Medicaid now accounts for over 14 percent of states' expenditures from their general funds, it is also a major priority for the states, which on average finance 43 percent of Medicaid spending. The emphasis on curtailing Medicaid expenditures represents a distinct change in philosophy from the late 1980s, when the priorities of the program were to expand eligibility and coverage.

Medicaid generally covers four broad categories of beneficiaries: poor elderly people, poor disabled people, poor and near-poor children and pregnant women, and certain other adults in low-income families. (The majority of those other adults receive cash welfare benefits.) Recently, however, the federal government has granted waivers to several states, allowing them to expand coverage to a broader low-income population.

CBO projects that 37 million people (about 14 percent of the population) will receive Medicaid benefits in 1996. Under current law, the number of Medicaid beneficiaries is projected to climb at an average rate of 2.7 percent a year between 1996 and 2002, reaching 43 million in 2002 (see Table 6-9). CBO projects, however, that Medicaid benefit payments will grow considerably faster over the period, at an average annual rate of over 10 percent. In addition to the increasing number of beneficiaries, that growth rate reflects benefit payments per beneficiary that are projected to grow at about 7 percent a year.

Price increases and greater service utilization and intensity account for most of the rise in benefit payments per beneficiary, but part results from changes in the mix of beneficiaries. Children account for about one-half of all Medicaid beneficiaries, but because expenditures per child are relatively low, they represent less than one-fifth of Medicaid benefit payments. By contrast, because of their more extensive medical and long-term care needs, the aged and the disabled account for over two-thirds of Medicaid benefit payments and constitute slightly more than one-quarter of Medicaid beneficiaries. The number of aged and disabled beneficiaries is projected to grow at a somewhat brisker rate than the number of children and other adults over the 1996-2002 period, with the number of disabled beneficiaries growing at almost 4 percent a year.

The federal and state governments jointly fund the Medicaid program, but the states administer it. The program constitutes an open-ended federal entitlement for eligible people, with the federal government matching state expenditures at a rate that is based on the state's relative per capita income.

The federal government establishes the broad criteria for eligibility and covered services, specifying minimum standards that states must meet. But the states retain considerable discretion over program operations. As a result, the ability of the federal government to control growth in expenditures is limited, and wide variations among the states occur in eligibility, coverage, and spending. Consequently, most recent proposals to slow Medicaid spending have concentrated on changing the underlying fiscal relationship between the states and the federal government rather than focusing on the details of particular program policies. Although those proposals would use different approaches to constrain the growth of federal Medicaid spending, they would all grant the states more flexibility to run their programs than they now have.

Any proposal to limit the federal Medicaid funds available to the states would have to address several fundamental policy questions, including:

o How should Medicaid funds be allocated among the states?

Table 6-8.
Projections of Federal Medicaid Outlays, 1996-2002 (By fiscal year, in billions of dollars)

	1996	1997	1998	1999	2000	2001	2002	Average Annual Percentage Rate of Growth, 1996-2002
Medicaid Outlays	95.8	105.1	115.4	126.4	138.2	151.5	166.4	9.7
Benefits	80.8	88.9	98.5	108.3	118.9	131.0	144.5	10.2
Payments to disproportionate share hospitals	10.8	11.5	11.8	12.4	13.0	13.7	14.3	5.0
Administration	4.3	4.7	5.1	5.7	6.3	6.9	7.6	10.0
Medicaid as a Percentage of Total Federal Outlays	6.1	6.3	6.6	6.9	7.2	7.5	7.8	n.a.

SOURCE: Congressional Budget Office projections, May 1996 baseline adjusted for the effects of the Omnibus Consolidated Rescissions and Appropriations Act signed April 26, 1996.

NOTE: n.a. = not applicable.

- o What requirements, if any, should be placed on the states to cover certain population groups or benefits?
- o Should the federal government guarantee coverage for all eligible individuals in certain population groups or should the federal financial commitment be limited?
- o Should built-in protections exist for states that experience rapid growth in their Medicaid populations or have other special needs?

Provisions that address those issues may or may not affect federal costs, but they can have profound implications for the distribution of federal funds and access to care for Medicaid beneficiaries. In addition, all proposals to reform the Medicaid program have to deal with a range of programmatic policy questions that have implications for federal costs, the allocation of federal funds, and access to care. In turn, those issues are tied to provisions in the current Medicaid program that would have to be adapted to mesh with an alternative program structure.

Table 6-9.
Projections of Medicaid Beneficiaries and Federal Outlays for Medicaid Benefits, 1996-2002 (By fiscal year)

	1996	1997	1998	1999	2000	2001	2002	Average Annual Percentage Rate of Growth, 1996-2002
Benefits								
(Billions of dollars)[a]	80.8	88.9	98.5	108.3	118.9	131.0	144.5	10.2
Aged	25.7	28.1	30.8	33.8	36.9	40.5	44.3	9.5
Disabled	29.2	32.2	36.1	40.2	44.5	49.2	54.7	11.0
Children	15.3	17.2	19	20.7	22.7	25	27.5	10.3
Other adults	10.5	11.4	12.5	13.6	14.9	16.4	18.0	9.4
Beneficiaries								
(Millions of people)[b]	36.8	38.1	39	40	41.1	42.1	43.1	2.7
Aged	4.3	4.5	4.6	4.7	4.9	5.0	5.1	2.9
Disabled	6.0	6.3	6.5	6.8	7.0	7.3	7.5	3.8
Children	18.6	19.4	19.8	20.3	20.7	21.2	21.7	2.6
Other adults	7.8	7.9	8.1	8.3	8.4	8.6	8.8	2.0
Average Benefits per Beneficiary (In dollars)								
Aged	5,930	6,240	6,690	7,140	7,590	8,130	8,680	6.6
Disabled	4,850	5,140	5,540	5,940	6,340	6,760	7,270	7.0
Children	820	890	960	1,020	1,090	1,180	1,270	7.6
Other adults	1,350	1,430	1,550	1,640	1,760	1,900	2,050	7.2

SOURCE: Congressional Budget Office.

a. Benefits include payments to qualified Medicare beneficiaries and exclude payments to disproportionate share hospitals and administrative costs.

b. Beneficiaries include any person receiving Medicaid services during the year.

Overview of Policy Options

To illustrate the potential effects of alternative approaches for restructuring the federal/state relationship in the Medicaid program, CBO reviews three generic options in this chapter: block grants, limits on average federal expenditures per capita (known as per capita caps), and reductions in federal matching rates. For the purpose of comparison, the same savings target is assumed for each option--$70 billion over six years--with about half of the savings coming from reductions in payments to hospitals that serve a disproportionately high number of low-income patients (so-called disproportionate share hospital, or DSH, payments). By comparison, the Administration's 1997 budget has a savings target for Medicaid of $59 billion over seven years, and the 1997 budget resolution has a target of $72 billion over six years.

The federal savings associated with each option would generally depend on many policy details and on behavioral responses by the states. In addition, given the same overall budget targets, the degree to which the federal government could control federal Medicaid outlays, and thereby guarantee a given level of savings, would vary. The distributional consequences for the states and the effects on different beneficiary groups could also differ considerably.

Factors Affecting Federal Costs

In general, the more a particular Medicaid option enabled states to influence the amount of federal spending, the less control the federal government would have over Medicaid spending and, hence, the greater the uncertainty for the projected federal savings. Achieving target levels of federal savings would also be less assured if particular population groups continued to have an entitlement to Medicaid benefits under federal law.

In restructuring the Medicaid program, policymakers would have to consider several specific policy issues that would affect federal outlays. To estimate the options in this chapter, CBO has made assumptions about how those issues would be addressed:

- One important question is how a restructured program should incorporate payments for qualified Medicare beneficiaries (QMBs)--low-income Medicare beneficiaries who have their Medicare premiums and cost sharing paid for by the Medicaid program. CBO assumes in this case that the QMB program would continue to pay Medicare premiums for eligible beneficiaries, though not their cost-sharing amounts, with the same degree of federal financial participation as under current law.

- A second major policy consideration is whether Medicaid payments to disproportionate share hospitals should continue in their current form. Those payments will amount to almost $11 billion in 1996 and account for more than 11 percent of federal Medicaid spending. In line with several recent proposals, CBO assumes in this case that targeted payments to "safety net" hospitals would replace the present disproportionate share program. Under the assumed policy, DSH payments would decline to about $6 billion a year by 2000 and hold at that level through 2002. That policy would generate $35 billion in federal savings over six years. Consequently, to generate a total of $70 billion in savings would require an additional $35 billion from the restructuring options.

- To generate part of their share of financing, should states be allowed to use financing schemes based on voluntary donations from providers and taxes on providers? That policy decision would affect federal outlays under some options. The options in this chapter assume that existing restrictions on provider donations and taxes, enacted in the Medicaid Voluntary Contribution and Provider-Specific Tax Amendments of 1991, would be maintained.

Factors Affecting the Distribution of Federal Funds

Two key factors would determine the distribution of federal dollars among the states in a redesigned Medicaid program: the initial allocation among the states and the subsequent rate of growth for each state. Recent Medicaid proposals have generally assumed that the initial allocation of federal funds would reflect the actual distribution in some recent base year, inflated to the date the program takes effect. Proposals differ, however, in whether they would actively seek to redistribute federal Medicaid funds among the states over

time. Although redistribution policies would have major implications for individual states, they would not necessarily increase federal costs if the overall target rate of growth for Medicaid spending did not change.

The issue of redistribution arises because of the present wide disparities in federal Medicaid funding among the states relative to the size of their poverty populations. In 1993, for example, Connecticut received about $3,600 in federal Medicaid funds per person in poverty, whereas Mississippi received less than $1,500. As long as Medicaid remains an open-ended matching program, one might argue that such disparities reflect the choices the states have made in allocating resources. But if the open-ended federal match no longer existed, as it would not under certain restructuring options, some states would probably view a policy that established the current distribution of federal funds in law as inequitable. Because proposals for restructuring differ in how much they would limit states' ability to affect the federal Medicaid funds that they receive, the political pressures to reallocate funds among the states might vary, depending on the proposal.

Factors Affecting Beneficiaries

How beneficiaries fared under a restructured Medicaid program would depend on a variety of factors, including:

- The total federal dollars available to each state initially and over time;
- How the states responded to the new fiscal and programmatic incentives;
- The amount of discretion granted to the states to change eligibility and benefits, enroll beneficiaries in managed care plans, and set reimbursement rates for providers; and
- The status of the federal entitlement to benefits for eligible population groups.

Any of the major proposals for restructuring Medicaid could be consistent with the same projected level of federal spending as assumed here, and with the same broad policies to grant greater flexibility to the states. Examples of such policies include allowing the states to enroll Medicaid beneficiaries in managed care plans without a federal waiver, repealing the Boren amendment (requiring states to pay hospitals and nursing homes rates that are reasonable and adequate to meet the costs incurred by efficiently and economically operated facilities), and allowing the states to establish their own criteria for defining disability. However, because the incentives for states to cover certain types of beneficiaries would vary under the alternative options, the ramifications for beneficiaries might differ. Predicting the effects on beneficiaries is especially difficult if states would be granted greater flexibility to manage their programs in conjunction with other fundamental changes to the program.

Another important program feature that would affect outcomes for some beneficiaries is whether they continued to have a federal entitlement to benefits, as under current law. But many current Medicaid beneficiaries are entitled to benefits only because their state has chosen to cover them, not because federal law required them to be covered. In addition, many of the benefits that states offer in their Medicaid programs are optional. Faced with reductions in the rate of growth of federal Medicaid funds, states could resort to a variety of mechanisms to slow the rate of growth of spending, including making cutbacks in eligibility and benefits. A federal entitlement would provide guarantees only to those beneficiaries who continued to be eligible for Medicaid services and only for those services that states continued to cover.

Option 1: Use Block Grants

Recently, block grants have been among the most widely discussed mechanisms for controlling Medicaid spending. In general, however, those proposals do not actually involve block grants in the usual sense of the term because the federal government would not make fixed lump-sum payments to the states. Rather, it would impose a ceiling on the maximum amount of federal Medicaid matching funds that a state could draw down in any year. That is the approach discussed here.

Description of the Option

The most important attribute of a block grant is that annual federal Medicaid spending in a state could not exceed a specified total amount. Once that ceiling had been reached, further expenditures of state dollars would not generate any additional federal matching funds. In principle, the federal government would face no further financial exposure, regardless of economic conditions or actions by the states.

Implicit in the concept of placing an absolute limit on federal Medicaid expenditures is to abolish the current federal entitlement to medical benefits for eligible individuals. The existence of such an entitlement essentially requires the federal financial commitment to be open ended. In other words, if more people who meet the eligibility criteria enroll in the program, federal expenditures must rise. Block grants would end that open-ended commitment.

Most proposals for block grants determine maximum federal Medicaid expenditures in any year by specifying annual target rates of growth in spending from some base year. Under the option considered here, for example, the base year would be 1995. Target expenditures for 1997 would be 1995 expenditures projected forward to 1997, using the projected rate of growth for 1996 and the target rate of growth for 1997. Maximum federal expenditures in any subsequent year would be the previous year's amount, increased by the target rate of growth for the year.

One can design such a block grant policy to achieve the necessary $35 billion in savings over six years in several ways. (As previously noted, only $35 billion would be needed in savings from block grants in order to achieve six-year savings of $70 billion because another $35 billion is assumed to be generated through reductions in DSH payments.) The approach described here would phase in the spending reductions. As a result, it would allow more of the savings to occur later in the 1997-2002 period and give states time to adjust to slower growth in federal Medicaid funds.

Under this illustrative option, the target rate of growth for federal Medicaid spending (excluding DSH and QMB payments) would be 9.7 percent in 1997, falling to 7.0 percent by 2002, and would average 8.3 percent over the 1996-2002 period. In contrast, using the same measure, federal Medicaid spending under current law would grow at slightly more than 10 percent a year over that period (see Table 6-10). In principle, postponing savings until the out-years, rather than having proportional reductions in spending throughout the period, would increase the likelihood of balancing the budget in 2002. Because of unforeseen events that could occur in the intervening period, however, realizing savings in the out-years would also be more uncertain.

Implications of the Policy

Of the three options considered in this chapter, a block grant approach would come the closest to ensuring that the federal government met its targets for federal Medicaid spending. Savings would be uncertain in the first year because the federal government would be obligated to pay title XIX claims incurred before the new program was established. But the federal government could place enforceable limits on the amounts it would spend each year after 1997.

To achieve those spending targets, however, the policy could not incorporate federal guarantees of medical coverage for particular population groups or open-ended protections for high-growth states. (Open-ended protections would allow states to draw down additional federal funds if enrollment among designated eligibility groups grew at faster rates than projected.) Depending on the actual legislative language, those types of provisions could override the limits on federal spending that a block grant nominally imposes.

The strict limits on federal financial exposure, combined with ending the individual federal entitlement to benefits, inevitably raises questions about the allocation of federal Medicaid dollars among the states under a block grant. Having a formula that establishes in legislation exactly how much state X may draw down relative to state Y forces a consideration of the fairness of the funding distribution. Of all the proposed options for restructuring Medicaid, block grant proposals are the most likely to incorporate explicit mechanisms to change the current distribution of federal Medicaid funds among the states.

Without a federal entitlement for individuals or any protection for high-growth states, how the states re-

sponded to the fiscal limits that a block grant imposes would have no impact on federal Medicaid spending. Those responses would, however, have major implications for the states' own expenditures and for access to care for low-income people. Once a state had drawn down its full annual federal allocation amount, it would have much less incentive than under current law to continue spending its own funds for Medicaid. After all, those additional expenditures would not draw down any more federal matching funds. At that point, Medicaid would have to compete for state dollars on an equal footing with other state-funded programs.

States might respond to fiscal restrictions by increasing the efficiency of their Medicaid programs--enrolling more beneficiaries in managed care, for example. They might also trim payments to providers (especially if they were no longer constrained by federal reimbursement mandates), cut back on benefits or eligibility, or require greater cost sharing by beneficiaries.

Because of concerns about the potential impacts on beneficiaries, some block grant proposals would require states to set aside certain percentages of block grant funds for services for particular population groups.

Table 6-10.
Federal Medicaid Outlays Under the Block Grant Option, 1996-2002 (By fiscal year, in billions of dollars)

	1996	1997	1998	1999	2000	2001	2002	Average Annual Percentage Rate of Growth, 1996-2002	Total Savings, 1996-2002
Current Law									
DSH payments	10.8	11.5	11.8	12.4	13.0	13.7	14.3	4.9	n.a.
QMB payments	1.9	2.1	2.4	2.5	2.7	2.8	3.0	7.9	n.a.
Other Medicaid outlays	83.1	91.4	101.3	111.5	122.5	135.0	149.1	10.2	n.a.
Total Outlays	95.8	105.1	115.4	126.4	138.2	151.5	166.4	9.6	n.a.
Block Grant with Declining Rate of Growth									
DSH payments[a]	10.8	9.3	7.9	6.4	6.0	6.0	6.0	-9.3	n.a.
QMB payments[b]	1.9	2.1	2.4	2.5	2.7	2.8	3.0	7.9	n.a.
Other Medicaid outlays[c]	83.1	91.2	99.6	108.1	116.9	125.7	134.5	8.3	n.a.
Total Outlays	95.8	102.6	109.8	117.1	125.5	134.5	143.5	7.0	n.a.
Changes in Outlays									
DSH payments	0	-2.2	-3.9	-6.0	-7.0	-7.7	-8.3	n.a.	-35.1
QMB payments	0	0	0	0	0	0	0	n.a.	0
Other Medicaid outlays	0	-0.2	-1.7	-3.3	-5.6	-9.3	-14.6	n.a.	-34.8
Total Outlays	0	-2.5	-5.6	-9.3	-12.6	-17.0	-23.0	n.a.	-70.0

SOURCE: Congressional Budget Office.

NOTE: DSH = disproportionate share hospital; QMB = qualified Medicare beneficiary; n.a. = not applicable.

a. DSH payments reflect the new targeted DSH program.

b. QMB payments are assumed to be unchanged.

c. Block grant outlays in 1997 include payments for Title XIX obligations incurred, but not paid, before October 1, 1996.

Other proposals would require states to guarantee coverage for some groups without a corresponding federal guarantee. (In the latter situation, states would bear the full risk for the guaranteed coverage as a condition for receiving federal Medicaid funds.) Still other proposals would increase the federal government's financial risk by allowing the states to draw down additional federal funds if their Medicaid enrollment was greater than anticipated.

Option 2: Use Per Capita Caps

Over the past year, various proposals for per capita caps have been the primary policy alternatives to Medicaid block grants under discussion. Such proposals would typically limit average federal Medicaid expenditures per beneficiary but would allow expenditures to grow as enrollment expanded. The proposals would, therefore, provide less protection for the federal budget than a block grant would offer, but they would give more flexible financial support to states with rapidly growing low-income populations. Because of the volatility of Medicaid eligibility, beneficiaries rotate on and off the program and many are not enrolled for a full year. Consequently, the per capita caps would be defined in terms of annual limits on spending per full-year-equivalent beneficiary.

Description of the Option

In specifying an illustrative option, CBO made the following assumptions:

- o Each state would have separate limits on average annual per capita spending for four eligibility groups: aged, disabled, children, and other adults.

- o In general, the following criteria for income eligibility would apply (reflecting current eligibility criteria under title XIX): a ceiling on income of 133 percent of the poverty level for pregnant women and children up to age 6 (with the option of 185 percent of poverty for pregnant women and infants under one year); a ceiling of 100 percent of the poverty level for other children under age 19, born after September 30, 1983; and Supplemental Security Income eligibility levels for the elderly and disabled, with the current special standard for income as an option for beneficiaries in nursing homes.[3] States with more generous income-eligibility criteria in effect on April 1, 1996, could continue to use those criteria.

- o The base year would be 1995. A state's average expenditure per full-year-equivalent beneficiary for each of the four eligibility groups in that year (excluding DSH and QMB payments) would be projected to 1997, using the projected national per capita rate of growth for that group in 1996 and the overall target rate of growth for per capita spending for 1997. The resulting 1997 amounts would represent the per capita caps for each group. Per capita caps in subsequent years would be the previous year's caps inflated by the target rate of growth of per capita spending.

- o A state's federal Medicaid expenditures (excluding DSH and QMB payments) in any year could not exceed the sum of the products for each eligibility group of the per capita cap amount and the number of full-year-equivalent beneficiaries. That is, federal Medicaid funds would be fungible so that expenditures below the total limit for one group could offset excess expenditures for another eligibility group.

- o States would be required to offer the same benefits as mandated under current law and could choose from the same range of optional benefits.

A variety of alternative policies for per capita caps could generate $35 billion in savings over six years, with correspondingly different time paths. This option would phase in lower rates of growth in per capita spending, producing greater and less certain savings in the out-years.

The actual growth rates of the caps would be about 6 percent in 1997, falling to less than 3 percent by 2002, and averaging slightly more than 4 percent over the 1996-2002 period. The corresponding growth rate in total Medicaid outlays (excluding DSH and QMB

3. The so-called 209(b) states could use different income eligibility criteria for the elderly and disabled.

payments) would average slightly more than 8 percent over that period (see Table 6-11 for the resulting per capita caps for each eligibility group). The assumption of fungibility would, however, allow actual per capita expenditures to exceed the caps in some groups if they were less than the caps in others and if the overall annual expenditure targets were not exceeded. Note that, unlike the block grant, each year's annual spending target would not be set in law but would depend on actual Medicaid enrollment in that year.

Implications of the Policy

Under a per capita cap proposal, the federal government would continue to share with the states the fiscal risk associated with macroeconomic uncertainty. If unemployment or poverty rates rose, resulting in expansions in Medicaid eligibility, both federal and state expenditures for Medicaid would increase correspondingly.

A per capita cap proposal would not, however, incorporate an unlimited federal entitlement to individuals. Rather, the federal guarantee would be capped. Accordingly, if average expenditures per full-year-equivalent beneficiary rose above the capped amounts because of rising prices or increases in the use of services, the states would shoulder the fiscal responsibility for the excess amounts. (To reinforce the capped nature of the federal entitlement, some proposals would specifically repeal the right of beneficiaries to sue over benefits in federal court.)

Because states would not face strict limits on their federally matched expenditures, achieving projected savings under a proposal for per capita caps would be more uncertain than under a block grant. Uncertainty would arise not only because the federal government would assume the risks associated with greater enrollment during recessions, but also because the behavior of the states could affect federal spending. With limits on average per capita spending, states would face similar incentives as under a block grant to operate their programs more efficiently and reduce spending per person. The incentives for eligibility and enrollment would differ, however.

States would generally have incentives to enroll more lower-cost beneficiaries and fewer higher-cost beneficiaries within each eligibility group, especially if the per capita caps proved to be constraining, which would be increasingly likely over time. Adding lower-cost and dropping higher-cost beneficiaries would help to keep average expenditures below the cap amounts. In addition, when possible, states would have incentives to classify beneficiaries in groups with higher per capita caps. For example, because the average per capita limit for the disabled would be higher, states could draw down more federal funds by grouping children with mild learning disabilities with disabled beneficiaries rather than with other children.

Not only are the effects of the states' responses on aggregate Medicaid spending uncertain, but inadequacies in data could limit the federal government's ability to enforce a per capita cap policy strictly, at least in the early years of the policy. Effective enforcement would depend on the availability of reliable, detailed data on expenditures and enrollment from the states, possibly requiring new or expanded reporting systems. CBO's estimates assume that the combined effects of the states' responses to the per capita limits and the difficulties in monitoring and enforcing those limits would reduce the potential savings from the per capita caps by 30 percent.

As with block grants, a policy of per capita caps would raise equity concerns about the distribution of federal Medicaid dollars among the states. Without any reallocation, block grants would establish the existing distribution of federal Medicaid funds in law. In contrast, under per capita caps the existing distribution of federal Medicaid dollars per beneficiary would be the starting point, but overall spending could still grow at different rates among the states. States that had operated more efficiently than others in the past and states with less generous benefit packages could be at a disadvantage. They might find it harder to keep average spending per beneficiary below the cap amounts because they would have less "fat" to trim or fewer optional services to cut back than other states. Moreover, states with lean benefit packages would probably find it difficult to expand their benefits in the future if they wanted to do so. (That same problem would arise under block grants, if no reallocation took place.)

Table 6-11.
Federal Medicaid Outlays Under the Option for a Per Capita Cap, 1996-2002 (By fiscal year)

	1996	1997	1998	1999	2000	2001	2002	Average Annual Percentage Rate of Growth, 1996-2002	Total Savings, 1996-2002
Current Law (Billions of dollars)									
DSH payments	10.8	11.5	11.8	12.4	13.0	13.7	14.3	4.9	n.a.
QMB payments	1.9	2.1	2.4	2.5	2.7	2.8	3.0	7.9	n.a.
Other Medicaid outlays	83.1	91.4	101.3	111.5	122.5	135.0	149.1	10.2	n.a.
Total Outlays	95.8	105.1	115.4	126.4	138.2	151.5	166.4	9.6	n.a.
Per Capita Cap Outlays (Billions of dollars)									
DSH payments[a]	10.8	9.3	7.9	6.4	6.0	6.0	6.0	-9.3	n.a.
QMB payments[b]	1.9	2.1	2.4	2.5	2.7	2.8	3.0	7.9	n.a.
Other Medicaid outlays[c]	83.1	91.4	99.7	108.1	116.7	125.5	134.6	8.4	n.a.
Total Outlays	95.8	102.8	109.9	117	125.3	134.4	143.6	7.0	n.a.
Changes in Outlays (Billions of dollars)									
DSH payments	0	-2.2	-3.9	-6.0	-7.0	-7.7	-8.3	n.a.	-35.1
QMB payments	0	0	0	0	0	0	0	n.a.	0
Other Medicaid outlays	0	-0.1	-1.6	-3.4	-5.8	-9.5	-14.5	n.a.	-34.9
Total Outlays	0	-2.3	-5.5	-9.4	-12.8	-17.1	-22.8	n.a.	-70.0
Average Spending for a Full-Year-Equivalent Beneficiary Under Current Law (In dollars)[c]									
Aged	11,050	11,620	12,510	13,420	14,340	15,410	16,520	6.9	n.a.
Disabled	5,310	5,630	6,070	6,510	6,960	7,430	7,990	7.0	n.a.
Children	1,150	1,240	1,340	1,430	1,530	1,650	1,780	7.6	n.a.
Other adults	1,890	2,010	2,170	2,310	2,470	2,660	2,880	7.3	n.a.
Per Capita Cap (In dollars)									
Aged	11,050	11,710	12,330	12,910	13,420	13,860	14,230	4.3	n.a.
Disabled	5,310	5,630	5,930	6,210	6,450	6,670	6,840	4.3	n.a.
Children	1,150	1,220	1,290	1,350	1,400	1,450	1,490	4.3	n.a.
Other adults	1,890	2,010	2,110	2,210	2,300	2,370	2,440	4.3	n.a.

SOURCE: Congressional Budget Office.

NOTE: DSH = disproportionate share hospital; QMB = qualified Medicare beneficiary; n.a. = not applicable.

a. DSH payments reflect the new targeted DSH program.

b. QMB payments are assumed to be unchanged.

c. Spending excludes DSH and QMB payments and includes administrative costs. Counts of full-year-equivalent beneficiaries exclude people who are eligible for QMB payments only.

Option 3: Lower Federal Matching Rates

Reducing federal matching rates would be the simplest of the three policy options to put in place because it would involve the least change to the existing Medicaid program. As mentioned previously, however, such a policy could be packaged with other provisions to give the states greater flexibility to manage their programs. Under those circumstances, substantial programmatic changes might occur.

Under current law, a formula that is based on the states' relative per capita income, subject to a maximum rate of 83 percent and a minimum rate of 50 percent, determines the federal medical assistance percentage (FMAP) that states receive for their Medicaid expenditures.[4] The 83 percent ceiling is not currently a binding constraint--that is, no state's FMAP would be above that rate without the ceiling. The 50 percent floor, however, benefits states with the highest per capita incomes (11 states and the District of Columbia, in 1996) and in some cases makes a dramatic difference to the amount of federal Medicaid dollars that they receive. Without the floor, the District of Columbia, for example, would have a 1996 matching rate of 12 percent, Connecticut's would be 18 percent, New Jersey's would be 25 percent, and New York's would be 36 percent.

Description of the Option

Of the many possible forms of an option to lower federal matching rates, two are explored here: reducing rates by the same proportion for all states, or lowering the floor percentage. CBO estimated those alternatives assuming that:

- o States would elect to use their own funds to make up some--but not all--of the difference between the federal funds they would have received under the old matching rate and the federal funds they would receive under the new matching rate (if the state's contribution remained the same).

- o The reductions in matching rates would go into effect in 1997 and remain the same for the 1998-2002 period.

- o Federal matching rates for QMB payments would be unchanged by the new provisions for matching rates.

To generate $35 billion in savings through 2002 would require a proportional reduction of 3.5 percent in all matching rates. As a result, the highest effective matching rate would become 74.6 percent and the new floor would be 48.3 percent. If only the floor was lowered, the new floor would be 42.6 percent. Under that alternative, six states would have their federal matching rates reduced to the new floor, and another six states would have matching rates that were less than 50 percent but above the new floor. Unlike the block grant and per capita cap options, CBO assumes that no phase-in of federal savings would occur under FMAP reduction options. Consequently, spending reductions would be greater initially and lower from 2000 onward than under the previous options (see Table 6-12). The time path of savings and outlays would be essentially the same under either of the two FMAP alternatives considered here.

Implications of the Policy

Unlike the previous two options, a policy to lower federal matching rates would place no limits on the amount of federal funds that states could draw down. Rather, they would have to pay a higher price in state dollars for every federal matching dollar they received. In addition, the federal entitlement for individuals would be unchanged. Thus, the federal fiscal obligation to the states would remain completely open ended, and the probability of realizing a particular level of savings would be more uncertain than under the other options.

Actual savings could differ from the estimates shown in this chapter because the behavioral responses of the states to lower matching rates would determine federal savings under this option. If states made up more of the difference, savings would be lower (and the converse). The more of their own funds that states spent, the more federal funds they would draw down, and the greater the reductions in matching rates that would be necessary to achieve a given level of savings.

4. The formula is $FMAP=100*(1-[\text{state per capita income}^2/\text{U.S. per capita income}^2]*0.45)$

Uncertainty about the responses of the states arises because they would face two opposing incentives. On the one hand, as every state Medicaid dollar would bring in fewer federal dollars, states would have incentives to reduce their financial commitments to the program. On the other hand, some states might choose to increase their expenditures to compensate for the lower federal matching rates and make smaller reductions in their programs.

Two factors would affect the access of beneficiaries to services--decisions by the states on whether to change the proportion of state funds allocated to the Medicaid program, and their related programmatic responses. Those responses would depend in part on the features of the option for reducing the matching rate. The greater the reduction in matching rates that the states experienced, the less likely it would be that they could compensate for the federal funding reductions through minor programmatic changes and increases in state appropriations.

Reducing federal matching rates proportionately would have a relatively greater fiscal impact on states with higher matching rates. That is, if states did not change their contributions to the Medicaid program,

Table 6-12.
Federal Medicaid Outlays Under a Proportional Reduction in Federal Matching Rates, 1996-2002
(By fiscal year, in billions of dollars)

	1996	1997	1998	1999	2000	2001	2002	Average Annual Percentage Rate of Growth, 1996-2002	Total Savings, 1996-2002
Current Law									
DSH payments	10.8	11.5	11.8	12.4	13.0	13.7	14.3	4.9	n.a.
QMB payments	1.9	2.1	2.4	2.5	2.7	2.8	3.0	7.9	n.a.
Other Medicaid outlays	83.1	91.4	101.3	111.5	122.5	135.0	149.1	10.2	n.a.
Total Outlays	95.8	105.1	115.4	126.4	138.2	151.5	166.4	9.6	n.a.
Outlays with Reduced Federal Matching Rates									
DSH payments[a]	10.8	9.3	7.9	6.4	6.0	6.0	6.0	-9.3	n.a.
QMB payments[b]	1.9	2.1	2.4	2.5	2.7	2.8	3.0	7.9	n.a.
Other Medicaid outlays	83.1	86.9	96.3	106.0	116.5	128.4	141.8	9.3	n.a.
Total Outlays	95.8	98.3	106.6	114.9	125.1	137.2	150.8	7.9	n.a.
Changes in Outlays									
DSH payments	0	-2.2	-3.9	-6.0	-7.0	-7.7	-8.3	n.a.	-35.1
QMB payments	0	0	0	0	0	0	0	n.a.	0
Other Medicaid outlays	0	-4.5	-5.0	5.5	-6.0	-6.6	-7.3	n.a.	-34.9
Total Outlays	0	-6.7	-8.9	-11.5	-13.0	-14.3	-15.7	n.a.	-70.0

SOURCE: Congressional Budget Office.

NOTE: DSH = disproportionate share hospital; QMB = qualified Medicare beneficiary; n.a. = not applicable.

a. DSH payments reflect the new targeted DSH program.

b. QMB payments are assumed to be unchanged.

those with higher matching rates would lose a higher percentage of their federal funds under a proportional reduction in rates. By contrast, lowering the floor for federal matching rates would affect only those states with the highest per capita incomes.

Conclusions About Medicaid

Policymakers generally agree that slowing the rate of growth of federal Medicaid spending would require the fiscal relationship between the states and the federal government to change. Given an open-ended federal matching formula, states have had strong incentives to expand their Medicaid programs and draw down additional federal funds. The effects of those incentives are apparent from the wide range of optional services and the optional beneficiary groups that many states choose to cover.

The three possible approaches to restructuring Medicaid financing, as discussed above, would expose the states to greater financial risks and would give them incentives to manage their programs more efficiently. Those same incentives could also result in the states' reducing their payments to providers, as well as cutting back on eligibility and covered services.

The differing approaches vary in the degree to which they would guarantee federal savings. After the first year or so, block grants could ensure that a target level of federal savings was achieved. Under that approach, the federal entitlement to benefits for individuals would end and the states would bear all the financial risks associated with economic downswings.

Per capita caps would maintain a form of capped entitlement for individuals. Moreover, by allowing federal financing to increase with Medicaid enrollment, the caps would require the federal government to share macroeconomic risks with the states. The behavioral responses of the states would also affect federal savings, which would not be the case under block grants.

Reducing federal matching rates would basically leave the program much as it is now: a federal entitlement for individuals would remain, and the federal government's commitment would be completely open ended. Federal savings under that option would depend on whether the states decided to spend more or less of their own funds, given that the marginal cost of every federal matching dollar would be higher.

Chapter Seven

Addressing the Impact of the Aging Population on the Long-Term Federal Deficit

Federal spending for Social Security and Medicare will approach the $1 trillion mark--nearly $2 of every $5 spent by the federal government --within a decade, according to the Congressional Budget Office's (CBO's) current baseline projections. In 2006, the first of the baby boomers will still be two years away from eligibility for retired-worker benefits under Social Security and five years away from the age of eligibility for Medicare. Although Social Security outlays have been increasing at about the same pace as the nation's gross domestic product (GDP), spending on Medicare has been growing much more rapidly because of steep rises in costs per enrollee. Once the baby-boom generation begins to retire, the costs of both programs will soar. Moreover, because life expectancy is likely to continue rising, the number of people eligible for those programs will continue to increase, further expanding their costs.

This chapter examines policy options for containing spending on Social Security and Medicare and maintaining their viability long after the baby boomers have retired. It differs from the rest in this volume and from CBO's previous deficit reduction volumes by focusing on spending beyond the budget window. Because Social Security and Medicare are long-term commitments that people are counting on when they retire or become disabled, and because problems will occur when a much larger portion of the population becomes eligible to participate in those programs, it is useful to consider more fundamental changes that might take longer to carry out.

Deciding how to deal with the budgetary pressures caused by the aging of the U.S. population will not be easy. The options presented in this chapter illustrate how difficult it would be to keep expenditures on Social Security and Medicare from growing as a share of national income in the face of the projected increase in the number of people eligible for the two programs. Large reductions in the growth of Social Security benefits would mean that a much smaller percentage of workers' earnings would be replaced when they retired or became disabled. Restructuring the Medicare program could limit their access to mainstream medical care.

I. The Long-Term Budgetary Impacts of an Aging Population

If the government made no changes in entitlement programs for the elderly, the forthcoming large increase in the retired population would dramatically expand federal spending. Expenditures for Medicare are already increasing rapidly because of the growth in costs per beneficiary. Indeed, currently projected spending for these programs cannot be financed indefinitely without either significantly increasing taxes as a share of GDP or substantially reducing the rest of government spending. Financing the entire growth in spending on these entitlements through borrowing is not a long-term option because substantial damage to the economy

could result. Moreover, the budgetary pressures caused by people's increasing lifespans are expected to persist at least throughout the 21st century.

The Economic and Fiscal Outlook Beyond 2006

Under CBO's most recent budget projections, the baseline total federal deficit will grow steadily over the next decade, from 1.9 percent of GDP in 1996 to 3.3 percent of GDP in 2006. The projection assumes that current budgetary policies will not change and that discretionary spending will grow at the rate of inflation up to the statutory caps imposed on it through 1998, keeping pace with inflation thereafter.

But longer-term projections are much more pessimistic. Once the baby boomers (that is, the population born from 1946 to 1964) begin to become eligible for Medicare and the retired-worker benefits of Social Security, spending on those programs will put additional pressure on the federal budget. Medicare spending has long been growing more rapidly than national income and has shown little indication of slowing down. Unless ways are found to reduce the growth in Medicare's per capita costs, the looming eligibility of the boomers for Medicare will place an enormous burden on the federal budget. (Spending for Medicaid has also been growing rapidly and could escalate with the aging of the boomers, as discussed in Box 7-1.)

Pressures on expenditures will be further intensified by the increased longevity of the elderly. Moreover, growth in the number of workers will most likely slow significantly when the baby boomers retire, because the birth cohorts that followed them are smaller and the rate of participation of women in the labor force is likely to grow less rapidly than it did in the past. Thus, unless the laws are changed, spending for federal programs that aid the elderly will increase significantly at the same time that revenues will be squeezed because the number of people working and paying taxes on earnings will grow more slowly.

Box 7-1.
The Outlook for Medicaid

Federal expenditures for Medicaid could also soar after the baby boomers reach retirement age, but the full impact would not be felt until later in the next century. Medicaid pays for a range of services not covered by Medicare for many low-income elderly and disabled people. Those services include prescription drugs and nursing home care. The program also pays Medicare's premiums and cost-sharing amounts for poor Medicare beneficiaries. Although those payments will start to rise as the baby boomers become eligible for Medicare, the major fiscal problem for the program will occur when the boomers begin to join the ranks of the "old old" and more of them begin to need long-term care services--about 2025.

Nonetheless, the effects of the aging of the boomers on federal Medicaid spending remain speculative because those effects will depend on the fiscal relationship between the federal government and the states that governs Medicaid in the future. If, for example, states were to receive federal Medicaid funds in the form of a block grant with a fixed annual rate of growth, the federal government would be protected against rapid increases in Medicaid spending for the elderly. Under those circumstances, it would be the states that would face the serious problems of addressing the growing long-term care needs of an increasingly elderly population.

As CBO's recent annual report points out, current U.S. budget policy is unsustainable in the long run.[1] If the country's future obligations were entirely paid for by borrowing, the economy would be seriously weakened. Deficit financing of that magnitude would lead eventually to accelerating interest rates and falling standards of living.

CBO's projections point to the benefits that would result if the Congress did not delay action on the deficit. Delaying action would increase the ultimate cost of

1. Congressional Budget Office, *The Economic and Budget Outlook: Fiscal Years 1997-2006* (May 1996), Chapter 4.

constraining the growth of the federal debt. Postponing difficult decisions makes the choices that will have to be made later even more difficult.

Moreover, the economic problem posed by the aging of the U.S. population is much broader than is reflected in its effects on the federal budget. The goods and services that will be available for baby boomers when they are no longer working will need to be produced by a relatively small workforce. Building up the nation's capital stock will help this smaller workforce produce a larger amount of goods and services. Increasing national saving and investment now by reducing the federal deficit is one way of having more goods and services tomorrow.

Slowing the Growth in Social Security and Medicare to Reduce the Deficit

The long-term deficit problem could be resolved by a combination of approaches involving reductions in future spending commitments for Social Security, Medicare, and other programs, together with increases in revenues. This chapter focuses on options for slowing the growth in future Social Security and Medicare spending because those programs are so large and so clearly affected by the aging of the U.S. population. It would be difficult to develop a solution to the nation's fiscal problem that did not involve slowing the long-term growth in spending for one or both of the programs. (Options for curtailing other spending or raising revenues have been discussed in previous chapters.)

Competing Goals

Through federal policies that have been in effect for many years, U.S. workers have come to expect that when they retire or become disabled Social Security will provide them with income that will replace a significant portion of their previous earnings, that Social Security benefits will be available for their survivors, and that Medicare will provide them with access to mainstream medical care. Today, more than 43 million retired or disabled workers, their dependents, and survivors receive monthly Social Security payments, and about 38 million people have Medicare coverage. Policymakers will need to weigh the benefits that those programs confer against the need to make some policy change, if not in them, then in the rest of government spending or in the taxes needed to finance them.

Social Security and Medicare are generally credited with having substantially improved the lives of the elderly and the disabled. In 1994, the elderly (those who are 65 and over) received about 40 percent of their cash income from Social Security. More than 98 percent of the elderly were enrolled in the Medicare Hospital Insurance (HI) program and 95 percent were enrolled in the Supplementary Medical Insurance (SMI) program.

Reliance on Social Security was especially high among those elderly whose cash income was relatively low. Families with at least one member receiving Social Security benefits who were in the lowest income quintile of elderly families received almost 90 percent of their income from Social Security. Those in the highest income quintile of elderly families received only 25 percent of their income from Social Security.

Options that would reduce the growth in spending for Medicare and Social Security can be thought of as interchangeable in the sense that a dollar saved in either program reduces the federal deficit by a dollar. Moreover, because most Medicare enrollees are also Social Security beneficiaries and vice versa, changes in either program generally affect the standard of living of the same people. That is an especially important point to keep in mind when considering a combination of options that would reduce Social Security benefits and increase Medicare premiums or copayments by enrollees.

But there is an important difference between the two programs. Although federal savings resulting from a change in the Social Security program almost certainly translate into fewer benefits paid to Social Security recipients, that is not necessarily the case for federal savings achieved by changes in the Medicare program. In particular, changes that would reduce payments to health care providers would reduce providers' income but would not necessarily diminish the standard of living of the enrollees if those payments were used to deliver health care services more efficiently.

Left untreated, the budgetary problem associated with Social Security and Medicare--and the difficulty of resolving it--will become imposing. In 2030, Social Security outlays will equal 6.4 percent of GDP, an increase of 1.7 percentage points over its current share, according to the intermediate projections of the program's trustees. Spending on Medicare, less premiums paid by enrollees, is projected to increase by 4.7 percentage points to 7.1 percent of GDP over that period, based on the intermediate projections of the Medicare trustees in their 1996 annual report. Under those combined projections, spending for Social Security and Medicare would account for almost 14 percent of GDP in 2030, almost double its current share of GDP.

The case for addressing the growth in spending for Social Security and Medicare before the boomers retire rests on at least two grounds. First, delay will only make the necessary actions more severe because the size of the accumulated federal debt will be that much larger. Second, concerns for both equity and efficiency suggest that the commitment to changes in these programs be made well before they are carried out. Entitlement programs for the elderly and the disabled are generally viewed as long-term commitments between the government and the citizenry, and people have based their behavior on current provisions. Deciding soon on any future changes in such programs and making gradual changes in spending and tax policies would give people more time to plan and adjust.

The precedent set by the Congress when it amended the Social Security system in 1983 is instructive. The changes included a substantial cutback in benefit growth by raising the normal retirement age. The first workers affected by that change were then only 45 years old, 17 years away from eligibility for retirement benefits. By announcing the change so far in advance, the government gave workers the opportunity to take it into account when planning for their retirement.

Increasing Taxes as an Alternative

Financing the projected growth in spending for Social Security and Medicare entirely through increased taxes would involve large changes in tax rates. Federal revenue is expected to total about 19 percent of GDP in 1996 and has ranged between 17 percent and 20 percent of GDP during the last 35 years. Increasing this share over the next 35 years to keep pace with the projected growth in spending for these two programs would require raising federal taxes to about 25 percent of GDP--well outside the range of U.S. experience but less than the level in many other industrialized nations.

Tax increases of that magnitude could adversely affect the economy. For example, raising revenues through increases in payroll tax and personal income tax rates could reduce people's incentive to work. That, in turn, would intensify the slowdown in economic expansion expected to result from the reduction in the growth of the labor force.

If the increase in spending that needed to be offset equaled only the projected growth in spending for Social Security, the problem would be much more manageable, although it would still require a sizable tax increase. Social Security outlays are projected to rise from about 11.6 percent of taxable payroll in 1996 to about 17.1 percent in 2030, with most of the increase occurring after 2010. An increase in the Social Security payroll tax of approximately 5 percentage points (shared equally between workers and their employers) would offset the additional spending.[2] Perhaps further increases of 1 or 2 percentage points would be needed over the subsequent 40 years. Paying for the projected growth in spending for Medicare with tax increases, however, would necessitate much larger increases not only by 2030, but in subsequent periods as well.

Thus, dealing with the long-term deficit problem caused by the aging of the U.S. population might well involve both spending reductions and revenue increases. This chapter examines various options for achieving spending reductions.

II. Social Security

In order to curtail the growth in spending for Social Security benefits, a proposal must either reduce the number of beneficiaries or reduce the benefits for which

2. Board of Trustees, Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds, *1996 Annual Report* (June 5, 1996), p. 170, based on their intermediate assumptions. Income from the payroll tax and taxation of benefits under current law is projected to increase from 12.6 percent to 13.1 percent of taxable payroll during this period.

they are eligible. The latter can be done by changing the method by which initial benefits are calculated or by reducing the rate at which benefits are subsequently increased.

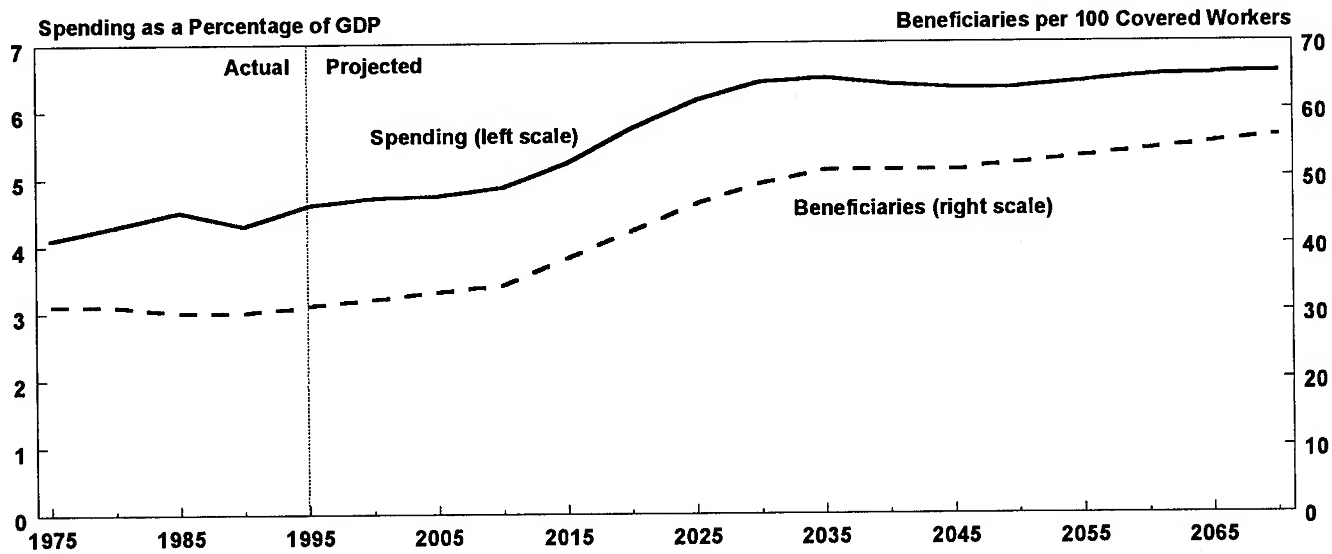
Most of the discussion in this section will focus on the part of the Social Security system that provides benefits to retired workers, members of their families, and their survivors; it is known as Old-Age and Survivors Insurance (OASI). The other part, Disability Insurance (DI), provides benefits to disabled workers under age 65 and their dependents. OASI is by far the larger program, last year accounting for almost 90 percent of spending for the two combined (referred to as OASDI).

Source and Magnitude of the Problem

The Social Security eligibility and benefit rules have produced a stable spending profile in recent years, and total spending has grown at about the same pace as the economy. But that relationship will change once the number of beneficiaries begins to increase much faster than the number of workers. Since 1980, Social Security outlays have accounted for between 4.3 percent and 4.9 percent of GDP. From now until the first wave of baby boomers becomes eligible for retired-worker benefits, the Social Security Administration projects that under current law, Social Security outlays will remain around 4.7 percent of GDP (see Figure 7-1). From 2010 to 2030, outlays will increase from 4.8 percent to 6.4 percent of GDP. Thereafter, Social Security's share of GDP will increase at a much more gradual pace.

The source of the problem is absolutely clear: since the mid-1970s, the ratio of beneficiaries to workers covered by the Social Security system has been about 30 to 100. That ratio is projected to rise to about 50 beneficiaries for every 100 workers by 2030, with the retirement of most baby boomers, and the combination of a relatively low birth rate and longer life expectancy will keep increasing the ratio thereafter. Given the commitments to provide benefits under current law,

Figure 7-1.
Growth in Social Security Outlays and Number of Beneficiaries, 1975-2070



SOURCE: Congressional Budget Office based on intermediate assumptions from the 1996 report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds.

NOTES: Social Security outlays as a percentage of gross domestic product (GDP) are presented on a fiscal year basis for 1995 and earlier years; projections to 2070 are presented on a calendar year basis.

Data are plotted at five-year intervals.

the increases in the ratio of beneficiaries to workers directly translate into increases in outlays as a percentage of GDP (see Figure 7-1).

Major Issues

The Congress will need to plan for the retirement of the baby boomers by deciding what the Social Security system should attempt to accomplish and what legislative changes will be needed to ensure that the system achieves its goals.

The current design of the Social Security system represents a balance between the goal of ensuring an adequate level of benefits to even the poorest beneficiaries and the goal of equitably distributing benefits in the sense that workers who have paid more taxes for Social Security should receive more in benefits, providing a reasonable return on their tax payments. The progressive benefit structure reflects those dual goals. Retired workers with low wage histories receive benefits that replace a higher percentage of their preretirement earnings than do the benefits of other retired workers. Nonetheless, workers who earned higher wages receive higher benefits. Achieving both goals will become more difficult when there are fewer workers per beneficiary.

Changes in the design of the Social Security system must be considered in the light of their potential effects on people's incentives to work and save. For example, lower benefits for retired workers could encourage them to remain in the labor force longer, particularly if the age of earliest eligibility was raised. Likewise, reductions in benefits could encourage workers to save more.[3]

The 1994-1995 Advisory Council on Social Security, appointed by the Secretary of Health and Human Services, struggled with those issues for more than two years and failed to reach a consensus among its members, partly because they held divergent views about how large a role Social Security should play in the future (see Box 7-2 on pages 454 and 455).[4] Much of the debate within the council reflected competing views about the extent to which the government should be responsible for the well-being of workers and their families once they have retired or become disabled. At least two competing views emerged. One envisions keeping the Social Security benefit structure essentially as it is, continuing to provide the largest component of retirees' incomes. Under that view, the social insurance role of the system would remain intact and increased taxes would be used to pay most of the additional costs caused by the demographic changes. The other view envisions a smaller public system in which future workers would rely more heavily on other sources of income when they stopped working, such as private pensions, individual retirement accounts, and other savings.[5]

Specific Benefit Options

A useful framework for examining options for containing spending on Social Security is a consideration of changes that would be needed to maintain the program's outlays at their current level of about 5 percent of GDP throughout the next 75 years. That is, what steps could be taken that would prevent federal expenditures for Social Security from growing more rapidly than the economy after the baby boomers retire? Stabilizing the ratio of Social Security spending to GDP provides a convenient yardstick for comparing options, although it is not necessarily the goal that one might seek to achieve in view of the magnitude of the expected demographic shift.

To keep outlays for Social Security from exceeding about 5 percent of GDP, spending must be held to

3. Much has been written about Social Security's effects on labor supply and private savings and on how much changes in Social Security provisions might alter people's decisions about when to retire and how much to save. This literature is reviewed in Michael D. Hurd, "Research on the Elderly: Economic Status, Retirement, and Consumption and Saving," *Journal of Economic Literature,* vol. 28 (June 1990), pp. 565-637; and in 1994-1995 Advisory Council on Social Security, Technical Panel on Trends and Issues in Retirement Saving, *Final Report,* forthcoming.

4. Until recently, the Social Security Act required that an advisory council be established every four years to review the status of the Social Security and Medicare trust funds and their relationship to their long-term commitments. That requirement ended when the Social Security Administration became an independent agency.

5. For a fuller discussion of those competing views, as well as a comprehensive survey of options for reducing the actuarial imbalance in the Social Security system and the presentation of a framework for assessment, see 1994-1995 Advisory Council on Social Security, Technical Panel on Trends and Issues in Retirement Saving, *Final Report.*

about 75 percent of its projected level under current law in 2030 and somewhat less thereafter. The specific options considered here were patterned after several that have been proposed in recent years and were selected to illustrate both the strengths and weaknesses of the major approaches and trade-offs that the Congress would face in designing a specific policy. Those options could be combined with one another or with revenue options.

The savings estimates reported here are provided by the Social Security Administration's Office of the Actuary and are intended to indicate relative magnitudes of change. They are based on the intermediate economic and demographic assumptions used in the 1995 annual report of the trustees. (The estimates were provided to CBO before the 1996 annual report of the trustees was issued. Although the estimated savings from each option would probably be somewhat different under the new assumptions, the differences are not large enough to change the qualitative findings discussed here.)

Reduce the Replacement Rates in the Benefit Formula

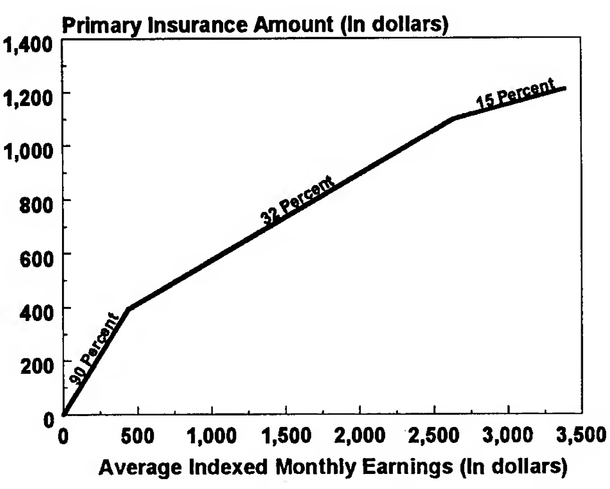
The most straightforward method of reducing the growth in Social Security spending is to lower the replacement rates in the benefit formula. The immediate effect of that approach would be to reduce benefits going to newly eligible beneficiaries. The full savings of a specified reduction would not be achieved until all of the beneficiaries whose initial benefit had been determined under the previous formula were no longer receiving benefits.

Under current law, benefits of retired (and disabled) workers are based on their earnings history, expressed as an average level of earnings over their working lifetime, known as the average indexed monthly earnings (AIME). From that average, a formula is used to calculate a worker's primary insurance amount (PIA), which is then adjusted for a number of factors, such as reductions for early retirement, credits for later retirement, and increases for inflation.

A worker's AIME is based on wages in covered employment (up to the taxable maximum), with some adjustments. Earnings on which retired workers and their employers paid Social Security taxes are indexed to compensate for past inflation and real wage growth. To convert the AIME to the PIA, a formula is applied that is progressive in that the PIA is a higher proportion of preretirement earnings for people with low average earnings than for those with higher earnings.

Under the formula, Social Security benefits replace 90 percent of the first part of a worker's AIME. But for subsequent portions of the AIME, the proportion falls--first to 32 percent and finally to 15 percent (see Figure 7-2). For workers who reach age 62 in 1996, the formula is as follows: a worker's PIA equals 90 percent of the first $437 of the AIME, plus 32 percent of the AIME between $437 and $2,635, plus 15 percent of the AIME over $2,635. The points at which the percentage of the AIME that is replaced by the PIA changes (known as "bend points") are indexed to average annual earnings for the labor force as a whole. Consequently, as wages rise over time, average replacement rates are maintained.

Figure 7-2.
Primary Insurance Amounts in Relation to Average Indexed Monthly Earnings Under Current Law for Workers Who Turned Age 62 in 1996



SOURCE: Congressional Budget Office.

NOTE: For workers in this cohort who retired at age 65 (in 1999), the primary insurance amount would be based on the formula illustrated in this figure, with the amounts increased by the cost-of-living adjustments effective in 1996, 1997, and 1998.

Box 7-2.
The Advisory Council's Plans for Balancing the Trust Funds

In June 1994, the Secretary of Health and Human Services appointed a 13-member Advisory Council on Social Security to review the status of the Social Security trust funds. The major focus of the council has been to develop recommendations for improving the long-range financial status of the program. Although they have not yet issued their final report, testimony of the chairman, Edward Gramlich, and two other members before the Senate Finance Committee in March and the discussion at their final meeting in April indicate that the members were unable to reach a consensus. Instead, their report will present three different plans for improving the financial status of the program. Some of the specific provisions would reduce the growth in spending by changing Social Security benefits. Other provisions involve changes in the amount of revenues credited to the trust funds or the investment policies for the funds. The specific provisions that will be in the council's final report may differ from those described here.

Each of the three plans of the advisory council was estimated by the actuaries of the Social Security Administration to restore the actuarial balance of the Social Security trust funds over the 75-year period ending in 2070. Some of the specific provisions, however, would improve the financial status of the trust funds in ways that would not help reduce the federal deficit or improve the capability of the economy to deal with the expected sharp increase in the number of beneficiaries.

Social Security Trust Funds

The advisory council uses the projected actuarial balance of the trust funds as a key indicator of the financial health of the Social Security system and as a baseline against which to estimate the effects of its plans on the long-range financial status of the program. In brief, the Old-Age and Survivors Insurance (OASI) Trust Fund and the Disability Insurance (DI) Trust Fund are separate accounts in the Treasury. Revenues received from Social Security payroll taxes on workers and their employers and part of the revenues received by the Treasury from the taxation of certain Social Security benefits are deposited into the trust funds. (The remaining revenues from taxing benefits go into Medicare's Hospital Insurance Trust Fund.) Social Security benefits, administrative expenses, and other authorized expenditures are paid from the OASI and DI funds. At the end of fiscal year 1995, the funds held almost $500 billion in assets, most of which were invested in special interest-bearing federal securities.

On the basis of the intermediate assumptions used by the funds' trustees in their most recent report, the assets of the combined OASI and DI trust funds are projected to grow rapidly, with annual expenditures remaining below income from taxes until 2012 and below income from taxes plus interest until 2019. After that time, the principal balance in the funds will be drawn down rapidly and will be exhausted in 2029. The trustees concluded that the funds would not be in close actuarial balance over the next 75 years, and that the difference between income and expenditures in the final year of this period, 2070, would equal 5.5 percent of taxable payroll (1.9 percent of gross domestic product).

Common Elements of the Three Plans

The three plans to be presented by the advisory council are referred to by its members as the "maintain benefits" plan, the "individual account" plan, and the "personal security account" plan. Advisory council members agree that several changes in the Social Security system should be made under any of the plans. They include covering state and local workers after 1997 and increasing the taxation of Social Security benefits.

"Maintain Benefits" Plan

Under this plan, benefits would be reduced only slightly compared with current law. To bring the system into

balance, more revenue would come from taxes on benefits and future wages, and 40 percent of the assets in the trust funds would be invested in equities, rather than Treasury securities. The portion of the revenue from the taxation of benefits that now is credited to the Hospital Insurance Trust Fund would be redirected to the Social Security funds. Taxes paid by workers would be increased through higher payroll tax rates beginning in about 2045.

Neither redirecting funds nor investing part of the trust funds in equities will assist the economy in preparing for the coming boost in the ratio of retirees to workers. Redirecting tax revenue from the Hospital Insurance part of Medicare to Social Security would mean only that the Hospital Insurance Trust Fund would be that much worse off. And simply changing the form in which trust fund assets are held will not change the amount of benefits to be paid out in relation to how much is produced by the economy.[1]

"Individual Account" Plan

The main elements of this approach are that benefit payments would be reduced by about 16 percent by 2030 and that workers would be required to pay 1.6 percent of their earnings up to the Social Security limit into a new mandatory individual retirement account beginning in 1998. Benefits would be cut primarily by reducing benefits for upper-income workers and raising the normal retirement age. The individual accounts would be held by the government for investment in equity index funds or other approved options and annuitized on retirement.

The plan would probably raise national saving--both by cutting government spending on benefits and by requiring mandatory saving for retirement--thereby helping to boost the capacity of the economy to support future retirees. Reducing benefits, however, would diminish the degree to which traditional Social Security benefits replace workers' earnings. In addition, the mandatory 1.6 percent payment into a retirement account might cause some distortions in the supply of labor.

"Personal Security Account" Plan

Under this plan, the current Social Security benefit formula would be phased out and ultimately replaced by a smaller, flat benefit of approximately $410 per month for future retirees who will be under age 55 in 1998. Five percentage points of the payroll tax would be redirected to new personal security accounts to be invested in financial instruments widely available in the financial markets and held for retirement purposes outside the government. Workers 55 or older in 1998 would continue to pay full payroll taxes and be covered under the existing system. Individuals between the ages of 25 and 55 would receive a combination of their accrued benefit under the existing system and a share of the flat benefit under the new system in addition to payments from their personal security account. A transition tax of 1.5 percent of covered earnings and borrowing from the Treasury would be used to cover the costs of moving from the old system to the new one.

Individuals would bear more responsibility for planning for their own retirement because they would decide how the money in their personal security accounts would be invested. That feature could be especially appealing to workers who earn relatively high wages and are concerned about the low implicit rate of return on the payroll taxes paid by them and their employers. National saving would rise in comparison with under current law, providing more resources for retirees and workers alike in future years. The distribution of benefits, however, could be quite different than that under the current system. And it is not clear who would bear the risk of bad luck or bad choices of investments.

1. See Congressional Budget Office, "Implications of Revising Social Security's Investment Policies," CBO Paper (September 1994).

In general, workers receive 100 percent of their own PIA in benefits if they first receive benefits at the normal retirement age, which is currently 65. The benefit is reduced if they retire earlier. For example, a worker who retires at age 62 receives a permanent 20 percent reduction. The size of that reduction is intended to be actuarially fair in that the present value of the reduced monthly benefits that average workers could expect to receive at age 62 is similar to the present value of the full monthly benefits they could expect to receive by delaying initial benefits until the normal retirement age. Likewise, workers who delay collecting benefits beyond their normal retirement age receive a delayed retirement credit to compensate them for the reduction in the length of time that they will receive benefits, although that credit will not reach its actuarially fair level of 8 percent a year for another decade.[6]

Workers who had average earnings throughout their careers and retired at age 65 last year were eligible for an annual retired-worker benefit of about $10,300, which replaced 43.2 percent of their previous annual earnings. Because the benefit structure is progressive, the replacement rate is inversely related to past earnings. For example, workers who earned 45 percent of average earnings each year would receive about $6,300, replacing about 58 percent of their past earnings. Workers who always earned the maximum taxable amount ($61,200 in 1995) would receive about $14,400, replacing about 24 percent of their past covered earnings.

Under current law, workers with average earnings who retire at age 65 after the turn of the century will be eligible for higher (inflation-adjusted) benefits than those paid to today's average earner, but the benefits will replace a smaller percentage of their past earnings. For example, the Social Security Administration projects that workers with average earnings who retire in 2030 will receive about $11,800 (in 1995 dollars), which will replace 36.4 percent of their past earnings.[7] Although that replacement rate is well below the average in recent years, it is similar to the percentage of earnings that was replaced for workers retiring at age 65 in the late 1960s.[8]

Most of the projected decline in the replacement rate is caused by the scheduled increase in the normal retirement age, which is to become age 67 for workers born in 1960 or later. Thus, workers who retire in 2030 at age 65 will receive a permanent reduction in their benefit of about 13 percent because of the actuarial reduction for early retirement. If they wait until 67 to retire, their replacement rate will be 41.8 percent, not far below the current rate for workers retiring at age 65.

The major advantage of using across-the-board reductions in replacement rates as a means of achieving savings is that they would do so in a way that would otherwise preserve the existing benefit structure. If the change in the formula was announced well in advance of the date when it would take effect, workers could try to adjust their retirement and savings plans accordingly. The major disadvantage of that approach is that some people, such as workers who suddenly become disabled and eligible for DI, would not be able to change their behavior and would therefore get substantially lower benefits than they would under current law after they stopped working.

A specific option that illustrates this approach would reduce the benefits of each successive cohort of workers who become eligible for Social Security disability or retired-worker benefits by 1 percent per year, starting in 1998 and ending in 2032. Thus, workers becoming eligible in 2010 would receive about 88 percent of their benefits under current law, and those becoming eligible in 2032 and thereafter would receive about 70 percent. Workers who had average earnings, became eligible for benefits in 2030, and retired at age 65 would receive annual benefits of roughly $8,500 (in 1995 dollars), about $2,000 below the amount that similar workers retiring at age 65 receive today.

The savings that would be achieved in a specific year would depend on the composition of beneficiaries by year of eligibility. The Social Security actuaries estimate that this option would ultimately achieve a 30 percent reduction in Social Security expenditures, once all beneficiaries were subject to the full reduction in

6. Starting with beneficiaries born in 1943, each year delayed beyond the normal retirement age (which will be age 66 for this cohort) will add 8 percent to their retired-worker benefits. The delayed retirement credit for workers reaching the normal retirement age in 1996 (age 65) is only 5 percent.

7. Board of Trustees, Federal Old-Age and Survivors and Disability Trust Funds, *1995 Annual Report* (April 3, 1995), p. 185.

8. Robert J. Myers, *Social Security*, 4th ed. (Philadelphia: Pension Research Council and University of Pennsylvania Press, 1993), p. 363.

replacement rates. It would achieve a 19 percent reduction in 2030 and a 25 percent reduction in 2040. Larger savings in future years would be achieved, of course, if the replacement rates of newly eligible beneficiaries were reduced further after 2032.

A variation of the option (expected to be included in one of three sets of options presented by the advisory council) would reduce the replacement rates in only the second and third brackets of the benefit formula. That is, beneficiaries would continue to receive 90 percent of their average earnings up to the first bend point. That variation, designed to help shield workers with relatively low earnings histories, would save less money unless larger reductions were made in the second and third brackets. The actuaries estimate that such a modification would eliminate nearly half of the savings that would be achieved from an across-the-board cut.

Raise the Retirement Age

Under current law, the age at which a worker becomes eligible for full retirement benefits is 65, and will gradually increase to 67. Members of Congress and others have recommended that the change to a normal retirement age (NRA) of 67 be accelerated and that the NRA be further increased thereafter.

Two specific options illustrate that approach (see Table 7-1). The first would speed up the transition to age 67 and then further increase it to keep up with fu-

Table 7-1.
Increases in Normal Retirement Age Under Current Law and Two Illustrative Options

Year of Birth	Year in Which Age 62 Would Be Attained	Year in Which Age 65 Would Be Attained	Normal Retirement Age	Reduction for Retirement at Age 65 (Percentage of PIA)
		Current Law		
1943	2005	2008	66	6.67
1960	2022	2025	67	13.33
		First Option		
1943	2005	2008	66	6.67
1949	2011	2014	67	13.33
1973	2035	2038	68	20.00
1997	2059	2062	69	25.00
		Second Option		
1943	2005	2008	66	6.67
1949	2011	2014	67	13.33
1955	2017	2020	68	20.00
1961	2023	2026	69	25.00
1967	2029	2032	70	30.00
1991	2053	2056	71	34.50

SOURCE: Congressional Budget Office based on information provided by the Social Security Administration, Office of the Actuary.

NOTE: PIA = primary insurance amount.

ture increases in life expectancy. The NRA of workers who turn age 62 in 2011 would be age 67. Thereafter, the NRA would increase by one month every two years (reflecting projected growth in the ratio of life expectancy at the NRA to potential work years). For example, the NRA would be 68 for workers turning age 62 in 2035 and 69 for workers turning age 62 in 2059. Workers would still be able to begin receiving benefits at age 62, and the amounts would be reduced accordingly. This option is patterned after a proposal expected to be included in one of the three sets of options presented by the advisory council.

The second option would also accelerate the transition to age 67, but would continue increasing the NRA by two months a year until it reached 70 in 2029. Thereafter, it would raise the NRA from 70 by one month every other year. This option is similar to one proposed by Senators Kerrey and Simpson in 1995 as part of a larger set of changes in the Social Security system. Their proposal would, in addition, increase the earliest age of eligibility, as discussed later in this section.

Each option would produce substantial savings, although not nearly enough by itself to achieve the spending targets presented earlier. In relation to projected spending levels under current law, the first option would reduce outlays by about 3 percent in 2030 and 8 percent in 2070. The second option would reduce outlays by about 8 percent in 2030 and 17 percent in 2070.

For most purposes, such an approach to cutting the growth in benefits is equivalent to cutting the growth in replacement rates. That equivalence can be seen by comparing the reductions from their PIAs that workers who began receiving retired-worker benefits at age 65 would get under current law and under the two options. For example, workers retiring at age 65 in 2038 would have their benefits reduced by about 13 percent under current law, 20 percent under the first option, and more than 30 percent under the second option.

One difference from the approach of directly reducing replacement rates, though, is that the benefits of workers who qualified for Disability Insurance would not be reduced. Thus, workers would have a stronger incentive to apply for DI benefits in order to receive higher monthly benefits. For example, under current law, workers retiring at age 62 in 2011 would receive 75 percent of their PIA; if, instead, they qualified for DI benefits, they would receive 100 percent. Under both of the options for increasing the normal retirement age discussed above, workers retiring at age 62 in 2011 would only receive 70 percent of their PIA, but would still receive 100 percent if they qualified for DI benefits.

Finally, some proposals for increasing the normal retirement age would keep the earliest age of eligibility for retired-worker benefits at 62, while others would raise it to 65 or older. (Currently, more than two-thirds of retired-worker beneficiaries choose to begin receiving benefits before age 65.) As long as the reductions for early retirement were kept actuarially fair, those two approaches would have a similar impact on projected Social Security outlays as a percentage of GDP. Increasing the earliest age of eligibility, however, would most likely increase the size of the workforce as workers delayed retirement, thereby adding to the nation's economic output. Moreover, it would help to ensure that once they did retire, workers would have higher benefits because they would not have incurred the actuarial reduction.

Opponents of raising the earliest age of eligibility argue that some of the workers who begin receiving benefits at age 62 have little if any choice--for example, because the job they held was especially physically demanding or they have become incapacitated. Opponents also contend that many of those early retirees have no pensions or other sources of income.

Reduce the Cost-of-Living Adjustments

Each year, monthly benefits are adjusted by the increase in the consumer price index (CPI). For example, the 2.6 percent cost-of-living adjustment (COLA) effective for December 1995 was based on the increase in the CPI between the third quarter of 1994 and the third quarter of 1995. The CPI for urban wage earners and clerical workers is used for that calculation. The basic benefit amount is indexed by the increase in the CPI, beginning when a worker became eligible for Social Security benefits. For retired-worker benefits, indexing starts at age 62.

An additional or alternative way of reducing the growth in Social Security benefits is to reduce the auto-

matic COLA. Instead of providing an annual COLA equal to the increase in the CPI, the law could be changed to provide a COLA equal to the CPI minus a specified number of percentage points. Two specific options were estimated for CBO by the Social Security actuaries to illustrate this approach. The first would determine the COLA for 1998 and thereafter based on the increase in the CPI less 2.5 percentage points. The second would base the COLA on the increase in the CPI less 1 percentage point. To reduce outlays by 25 percent in 2030 (and beyond) solely by means of an across-the-board permanent reduction in the COLA would require that the steeper cut in the COLA be made. The CPI-minus-1-percentage-point option would achieve less than half of the savings.

Reducing the automatic COLA for Social Security benefits has been widely discussed as a way of achieving considerable savings. As discussed in ENT-48 in Chapter 5, eliminating the COLA for one year or limiting it to less than the CPI could quickly produce large savings by exacting small reductions in benefits from a large number of people.

Many analysts feel that the CPI overstates increases in the cost of living, although that is a contentious issue. Perhaps the greatest sources of overstatement involve the treatment of quality change and new goods in the CPI, but the empirical evidence on those problems is limited. Those difficulties continue to be cited, even in the absence of strong evidence, because the consequences of failing to adjust properly for quality change and the introduction of new goods could be great, and some analysts indicate an overstatement of about 1 percentage point a year.[9] The degree to which the CPI may overstate the cost of living for the general population could be different than for people who receive Social Security benefits, but little research has been focused on that issue. In short, although it is possible that the current indexing scheme overcompensates beneficiaries for price change, the evidence is insufficient to determine how much overstatement occurs. To the extent that the CPI overstates increases in beneficiaries' cost of living, the COLA could be reduced without lowering beneficiaries' real benefits below what they received when they became eligible for the program.

But there are serious problems with using reductions in the COLA as a long-term method of achieving large savings. Compared with an equivalent across-the-board reduction in replacement rates (or an equivalent increase in the normal retirement age), the people whose benefits would be reduced most would be the oldest beneficiaries and those who initially became eligible for Social Security on the basis of disability. The option could be modified to reduce the COLAs only of beneficiaries whose benefits or incomes were above specified levels, but that would reduce the savings. (Some beneficiaries with low incomes and few assets would receive Supplemental Security Income benefits, which would offset some or all of the reduction in Social Security benefits; the increased spending for SSI would help those beneficiaries, but would reduce the budgetary savings from this option.)

The cumulative impact of even a relatively small reduction in COLAs would be quite large for older beneficiaries. For example, if benefits were adjusted by 1 percentage point less than the CPI each year, retired workers (or their survivors) at age 74 would incur an 11 percent reduction in benefits, compared with the amount they would have received under current law; workers at age 84 would get a 19 percent reduction; and workers at age 94 would get a 27 percent reduction.

Furthermore, compared with cutting replacement rates or raising the NRA, less than full indexing of benefits could have undesirable effects on workers' decisions about saving and retirement. If their real benefits did not keep up with inflation and they failed to realize it while they were still working, they might mistakenly underestimate their need to save and might stop working too early.

Other Options

Carrying out any of the options presented above would eventually reduce Social Security benefit amounts (in relation to current law) for the majority of beneficiaries. Other approaches that have received attention in recent years would achieve savings by reducing or eliminating benefits for specific groups of beneficiaries. Much deeper reductions for those beneficiaries who were af-

9. The Bureau of Labor Statistics recently corrected two other sources of overstatement that have been identified as important. The problem with the treatment of generic drugs and part of the problem with formula bias were corrected in January 1995, and the remaining problem with formula bias was corrected in June of this year.

fected, of course, would be required to achieve comparable savings.

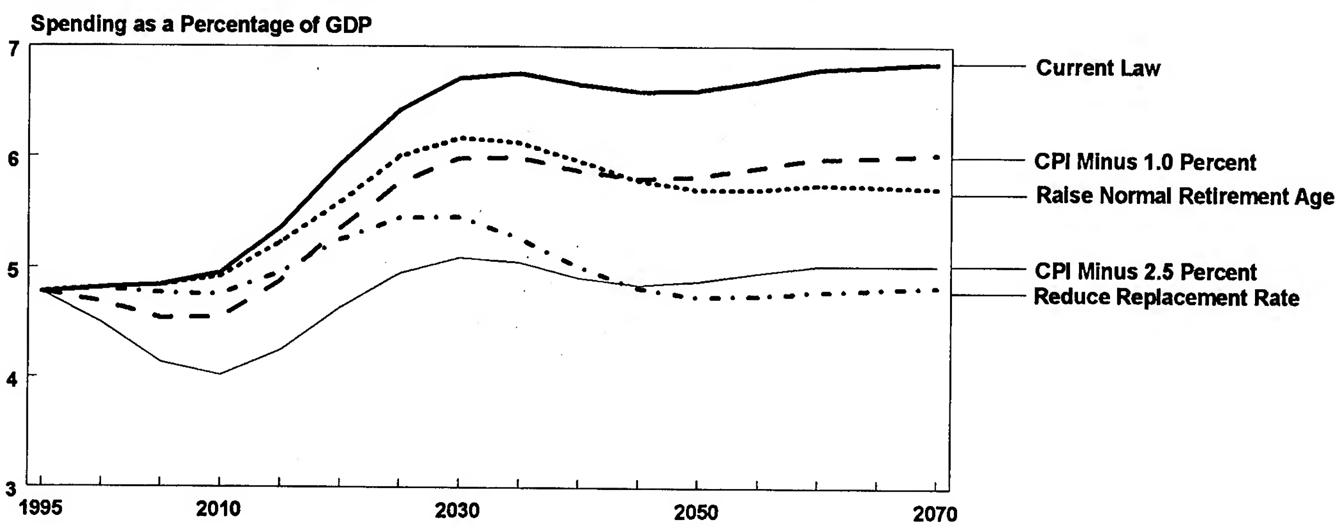
In some cases, the number of beneficiaries affected would be too small to have much impact on total spending, even if their benefits were eliminated. For example, an option presented in Chapter 5 to eliminate Social Security benefits for children of early retirees (ENT-41) would reduce Social Security outlays by about 0.1 percent in 2002. Likewise, lowering the benefit to spouses from one-half to one-third of the retired worker's PIA, which was proposed as part of a larger package by Senators Kerrey and Simpson, would reduce Social Security outlays by less than 2 percent because most spouses will be eligible for benefits as retired workers anyway. Combining several options affecting specific groups could produce more significant savings.

Another approach to reducing expenditures for Social Security (as well as for other programs) is to reduce or eliminate benefits going to people in middle- and upper-income families. In principle, Social Security benefits could be cut by any desired percentage by reducing benefits as beneficiaries' incomes rose, by denying benefits to people with incomes above specified thresholds, or by increasing the taxation of benefits. Specific options for doing so are presented in Chapter 5. One option described there (ENT-49) would reduce Social Security and other entitlement benefits as the total family income of the beneficiaries rose above $40,000. That option, proposed by the Concord Coalition, would reduce projected spending for Social Security benefits by about 7 percent in 2002. Making Social Security benefits fully subject to individual income taxes would increase revenues by a similar amount.

Conclusions About Social Security

Preventing outlays for Social Security from becoming a larger share of national income in the face of an aging population would require substantial cutbacks in the commitments that have been made under current law. Two options discussed in this chapter and illustrated in Figure 7-3 suggest how large the reductions would need to be. An across-the-board cut in replacement rates would ultimately require reducing benefits by nearly 30 percent from the amounts provided under current law.

Figure 7-3.
Illustrative Options for Reducing Growth in Social Security Outlays



SOURCE: Congressional Budget Office based on estimates provided by the Social Security Administration, Office of the Actuary, April 30, 1996.

NOTES: These estimates are based on the intermediate assumptions used in the 1995 report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds. Data are plotted at five-year intervals. CPI = consumer price index.

To achieve similar savings through a cut in cost-of-living adjustments would require that benefits be increased each year by about 2.5 percentage points less than the increase in the CPI. Each of those options would leave beneficiaries, as a group, much worse off. The latter option would leave initial benefits untouched, but would have extremely large effects on the benefits of very elderly beneficiaries and those who began receiving benefits at an early age because of disabilities.

Smaller reductions in COLAs and gradual increases in the normal retirement age (also illustrated in the figure) could be used separately to reduce the growth in benefits by smaller amounts or as a part of a larger package. One of the options illustrated here--setting annual cost-of-living adjustments 1 percentage point below the increase in the CPI--would maintain Social Security outlays at about 6 percent of GDP, well below the 6.8 percent projected by 2070 under current law in the 1995 trustees' report. The option to increase the normal retirement age to 70 by 2029 and to 71 by 2053 would maintain outlays a bit below 6 percent.

Combining the smaller COLA cut with an increase in the normal retirement age would probably keep spending for Social Security from increasing much above its current percentage of GDP. But it is important to bear in mind that many of the same people would be affected by both cuts. For those beneficiaries, the two seemingly modest reductions would add up to a substantial reduction in their benefits.

III. Medicare

Medicare provides federal health insurance for 38 million people who are aged, disabled, or have end-stage renal disease. Part A of Medicare, or Hospital Insurance, covers inpatient services provided by hospitals and skilled nursing facilities as well as by home health agencies and hospices. Part B, or Supplementary Medical Insurance, covers services provided by physicians, limited license practitioners (such as chiropractors and podiatrists), hospital outpatient departments, and suppliers of medical equipment.

Everyone who is eligible for Social Security benefits on the basis of age or disability is ultimately eligible for Medicare as well, although Medicare eligibility is delayed until age 65 for early retirees and by two years for disability beneficiaries. In addition, people who are 65 years old or older and not eligible for Medicare on the basis of their (or their spouse's) previous work history may enroll by paying the HI and SMI premiums.

Hospital Insurance benefits are financed primarily from current workers' payroll taxes, which are deposited in the HI trust fund. The actuarially fair HI premiums paid by the small proportion of aged beneficiaries who are not eligible on the basis of work history compose less than 1 percent of HI trust fund receipts. Since 1994, a portion of income taxes paid on Social Security benefits have also been credited to the HI trust fund, accounting for less than 4 percent of trust fund receipts. HI trust fund receipts were less than benefits paid in 1995, and that imbalance will increase in later years under current law.

Supplementary Medical Insurance benefits are financed primarily from general revenues, although beneficiaries pay a premium to cover some of the costs. Under current law, the SMI premium is set to cover 25 percent of the expected average cost of benefits for aged enrollees each year. For 1999 and later years, current law will limit annual percentage increases in SMI premiums to no more than the cost-of-living adjustment made to Social Security benefits each year. Because health care costs per enrollee are expected to grow more rapidly than the cost of living, the share of SMI costs financed by beneficiaries' premiums will start to fall after 1998, and an increasing portion of SMI trust fund receipts will come from general revenues.

Rapid increases in Medicare's costs have been a concern almost from the program's inception (see Table 7-2). Costs have grown rapidly from the beginning--as a share of both national income and the federal budget--but the baby boomers' retirement, beginning early in the next century, will greatly accelerate that trend unless substantial changes are made in the program.

In their 1996 report, Medicare's trustees indicated that the HI trust fund is not adequately funded even for the short term, before the effects of the baby boom will be felt. In fact, according to the latest projections, the HI trust fund will be exhausted in 2001 under current

Table 7-2.
Medicare Enrollment and Costs, 1975-1995 (In percent)

Calendar Year	Enrollment as a Percentage of Population	Costs as a Percentage of		Costs Net of Premiums as a Percentage of	
		GDP	Budget	GDP	Budget
1975	10.8	1.2	5.1	1.0	4.6
1980	11.8	1.6	7.0	1.4	6.5
1985	12.2	2.0	8.6	1.9	8.0
1990	12.9	2.3	10.2	2.1	9.3
1995	13.6	2.6	11.3	2.3	10.0

SOURCE: Congressional Budget Office.

NOTES: Medicare began in 1966 and initially covered only the aged. Eligibility was extended to disabled people and those with end-stage renal disease in 1974.

law.[10] Depletion of the HI trust fund could be avoided, however, by transferring general revenues to it as necessary, just as is now done for the SMI trust fund. The more fundamental problem is that the expected rate of growth in Medicare's costs (9.5 percent annually) is unsustainable, given the slower rate of growth in national income (5.6 percent annually).

Sources and Magnitude of the Problem

Rapid growth in Medicare's costs in relation to national income is the result of two main factors. One is growth in the number of beneficiaries, which currently accounts for about one-sixth of the growth in Medicare's costs. That will become more important after 2010, when the first of the baby-boom population will be eligible on the basis of age. Between 2010 and 2030, the rate of growth in enrollment is expected to average about 2.4 percent a year, whereas average growth from 1995 to 2010 will be about 1.5 percent a year. Medicare enrollment is expected to increase from about 14 percent of the population in 1995 to 22 percent in 2030 and to 25 percent by 2070. The second and more important factor is growth in costs per beneficiary, which has been substantially higher than growth in per capita income in the past and which is expected to continue at rapid rates. Both the Social Security and Medicare programs are affected by the first factor--growth in the number of beneficiaries--but only Medicare is affected by the second. For that reason, fiscal problems are more severe for the Medicare program than for the Social Security program.

In 1995, Medicare's costs were about 2.6 percent of gross domestic product, and costs net of premiums paid by enrollees were 2.3 percent of GDP (see Table 7-3). HI trust fund receipts were about 1.5 percent of GDP.[11] Thus, Medicare's net contribution to the deficit was about 0.8 percent of GDP, about a third of the total deficit for 1995. Under the trustees' assumptions, Medicare's costs are expected to continue to grow in relation to GDP, but revenues are not. By 2010, a year before the first of the baby-boom population will reach age 65, Medicare's costs will have grown to 4.5 percent, and costs net of premiums will be 4.2 percent of GDP. By 2070, Medicare's costs are projected to reach 8.8 percent of GDP, and costs net of premium receipts are ex-

10. Social Security and Medicare Boards of Trustees, *Status of the Social Security and Medicare Programs: A Summary of the 1996 Annual Reports* (June 1996), using the intermediate assumptions. The 1996 report came out after this chapter was written. For that reason, the options discussed later in this chapter use projections from the 1995 report. The 1995 projections for Medicare's total (HI plus SMI) costs as a percentage of GDP differ little from those in the latest report.

11. Although Medicare's trust funds also generate interest receipts, those are not included because they are intragovernmental transfers that do not affect the deficit.

Table 7-3.
Medicare Enrollment and Costs Projected to 2070, Under Current Law (In percent)

Calendar Year	Enrollment as a Percentage of Population	Costs as a Percentage of GDP	Premiums as a Percentage of GDP	Net Costs as a Percentage of GDP	Premiums as a Percentage of Medicare Costs	Premiums as a Percentage of Enrollee Income[a]
1995	13.6	2.6	0.3	2.3	11.0	3.4
2010	15.1	4.5	0.3	4.2	5.9	2.8
2030	22.0	7.5	0.3	7.2	4.4	2.4
2050	22.9	8.1	0.3	7.8	3.4	1.9
2070	24.5	8.8	0.2	8.5	2.7	1.5

SOURCE: Congressional Budget Office based on the Medicare trustees' reports for 1995.

NOTE: Under currrent law, Hospital Insurance (HI) Trust Fund receipts are projected to be about 1.5 percent of gross domestic product (GDP) throughout the period.

a. Enrollees' average income is assumed to increase at the same rate as GDP per capita.

pected to reach 8.5 percent of GDP. Additional federal (and state) spending for Medicare enrollees' health care takes place through Medicaid (see Box 7-3).

Although any long-term projection is highly uncertain, the assumptions behind the trustees' intermediate projections may not be realized under current law. They assume that growth in Medicare's costs per beneficiary will gradually slow after 2010 to be more in line with growth in national income per capita, so that the increase in costs as a percentage of GDP shown after 2020 accounts only for growth in the number of Medicare beneficiaries as a share of the population. In particular, the trustees assume that average annual growth in Medicare's costs per beneficiary will drop from about 8 percent before 2010 to only 5.4 percent thereafter. However, there are no policies currently in place designed to achieve that result.

Reasonable people may differ over what proportion of GDP is appropriately spent on health care for the Medicare population. For illustrative purposes here, it is assumed that the goal is to prevent Medicare's costs net of premiums from exceeding 4.2 percent of GDP--the value projected under current law for 2010. The objective of the following sections is to give some indication of what policies might be used to achieve that goal and to show the magnitude of the changes that would be necessary.

Box 7-3.
Medicaid Supplements to Medicare

Under current law, federal and state governments incur additional health care costs for the Medicare population through Medicaid. About 65 percent of Medicaid spending is for benefits to the Medicare population. All Medicare enrollees who are poor may apply to have Medicaid pay their cost-sharing and premium requirements. Medicare enrollees who are eligible for full Medicaid benefits also get coverage for services not covered by Medicare--such as prescription drugs and long-term care. Consequently, federal spending for health care for the Medicare population is about 1.3 times Medicare's costs, and combined federal and state spending is about 1.6 times Medicare's costs. Through Medicare and Medicaid combined, public costs for health care for the Medicare population would consume about 13 percent of national income by 2070 under the intermediate growth assumptions used by Medicare's trustees.

Major Issues

Medicare has been highly successful in achieving its original objective--ensuring access for the aged, and later the disabled, to mainstream medical care. Before Medicare, few aged or disabled people had the protection offered by health insurance. Today, most aged and disabled people have access to public insurance, for a premium equal to only about 10 percent of average benefits. (Premiums cover 25 percent of SMI costs, and SMI costs are about 40 percent of total Medicare costs.)

Medicare's costs have become increasingly burdensome to the economy, however. As discussed earlier, rapid growth in federal spending for health care is one of the main contributors to the federal budget deficit. If no action is taken, government health spending for Medicare enrollees will consume an enormous share of national income, crowding out spending for other needs. Further, federal debt will continue to increase as a share of GDP, eventually causing a decline in the standard of living. Thus, slowing the growth in federal spending for Medicare is essential for economic health.

Federal costs for Medicare could be reduced by increasing the premiums or cost-sharing requirements imposed on beneficiaries. But that approach by itself--without changing the options available to beneficiaries--could threaten some enrollees' access to medical care. It would reduce federal costs only by shifting them to beneficiaries, with little improvement in mechanisms for limiting growth in the total costs of care.

Broader policy goals would be served by putting policies in place that would slow the growth in total (not just federal) costs for health care. Such policies would encourage beneficiaries and health care providers to make more cost-effective choices than many do now. If successful, that approach would reduce the resources used for health care and ensure continued access for Medicare beneficiaries to medical care. Whether such efficiencies can be achieved, however, is uncertain.

Currently, nearly 90 percent of beneficiaries are enrolled in Medicare's fee-for-service sector, where financial incentives encourage providers to supply more services than may be necessary. And patients have little financial reason to refuse any services that may be of some benefit because they pay only a fraction of the costs of the services they use. Medicare beneficiaries have the option of enrolling in risk-based health maintenance organizations (HMOs), which are thought to provide more cost-effective care than is provided in the fee-for-service sector. But only about 10 percent of beneficiaries chose that option in 1995, despite the more generous benefits that most HMOs offered at little or no supplemental premium cost. Further, Medicare's costs for those who chose an HMO were probably higher than they would have been in the fee-for-service sector because Medicare's payments to HMOs (which are based on costs per enrollee in the fee-for-service sector) do not adequately adjust for the favorable selection that HMOs tend to experience among Medicare enrollees.

If the goal is to stabilize the share of national income consumed by Medicare, profound structural changes in Medicare may be required to achieve cost reductions of the necessary size. Most legislative proposals introduced in 1995 were intended to encourage development of more risk-based options for Medicare enrollees, reducing the current dominance of Medicare's relatively unmanaged fee-for-service sector. The underlying expectation was that health care costs would be lower if Medicare enrollees moved into risk-based plans offered in a competitive market. That expectation assumed changes in Medicare's payment methods for such plans so that Medicare could capture more of the savings that managed care can generate when compared with unmanaged fee-for-service coverage. The proposals would have reduced the growth of Medicare spending by reducing payments to both fee-for-service providers and risk-based plans.

Creating a practicable competitive market for risk-based health plans serving Medicare enrollees, however, is a complex undertaking that may take years to achieve. Because risk-based plans have financial incentives to undertreat (rather than to overtreat, as in the fee-for-service sector), effective provisions would be needed to ensure that patients were not denied appropriate services. Further, there are difficulties involved--especially in setting payment rates and accounting for selection bias among plans--that could result in higher rather than lower federal costs if not addressed appropriately.

If Medicare continued to set payment rates for risk-based plans on the basis of costs per enrollee in the fee-for-service sector as it does now, the savings from managed care would go (as they do now) toward enhancing benefits for enrollees or HMO profits rather than reducing federal costs. Although demonstration studies are in the planning stages, Medicare as yet has no experience with alternative methods, such as competitive bidding by plans, to establish payment rates.

In the long run, a competitive market for Medicare services can be feasible only if plans compete on the basis of quality and cost, rather than on their ability to select good risks. To avoid competition on the basis of risk, Medicare must adjust its payments to plans based on the risks of those actually enrolled in each plan. It is not certain that existing methods of risk adjustment are good enough, however, and it seems unlikely that significantly improved methods will be available soon. In the absence of good methods of risk adjustment, Medicare must monitor the offerings and the enrollment and disenrollment patterns of competing risk-based plans to identify and eliminate inappropriate practices.

The longer the Congress waits to initiate fundamental restructuring of Medicare, the more difficult it will be to keep Medicare's costs down. The Congress must also consider changes in the Medicaid program and in medigap requirements, both of which are closely related to Medicare. ("Medigap" refers to private insurance plans that supplement Medicare by covering all or most of Medicare's cost-sharing requirements.) If legislation eliminated the current requirement that Medicaid provide coverage for poor enrollees' premiums and cost-sharing under Medicare, other means-tested subsidies for low-income enrollees would be necessary to maintain their access to medical care. If Medicare's current fee-for-service sector remains, planners must consider changing medigap requirements because the first-dollar coverage typically provided by medigap plans eliminates the effects of Medicare's cost-sharing requirements on curtailing use of services by beneficiaries.

Specific Benefit Options

The options discussed here assume, for illustrative purposes, that the primary objective is to limit Medicare's net costs to no more than 4.2 percent of GDP--the level projected for 2010 under current law. Secondary goals are to maintain ready access to medical care for Medicare enrollees and to foster a reduction in total health care costs, rather than simply shifting federal costs for Medicare to enrollees or other payers. Results are presented under the assumption that, even under current law, the rate of growth in costs per enrollee will slow after 2010 to be more in line with growth in national income rather than continuing at the current rapid rate.

Raise the Age of Eligibility to Be Consistent with Social Security

Under this option, the age of Medicare eligibility would gradually increase from 65 to 67, phased in from 2003 through 2025, consistent with currently scheduled increases in the normal retirement age for Social Security benefits. Relative to current law, this option would reduce Medicare enrollment by about 9 percent and costs by about 5 percent by 2025. Costs would fall by less than enrollment because those who are 65 to 66 years old are typically the least costly enrollees. SMI premium collections would fall by 9 percent in line with the drop in enrollment, while GDP and HI payroll taxes could increase by up to 4 percent, depending on how many of those people affected by the delay in Medicare eligibility chose to delay retirement.

If the age of eligibility was increased to 70, phased in from 2003 through 2032, the maximum reduction in Medicare's costs would be about 15 percent. Enrollment and SMI premium receipts would ultimately fall by 22 percent, while GDP and HI payroll taxes could increase by up to 12 percent if all those affected worked until age 70.

Even if the age of eligibility was increased to 70 by 2032 and all those affected delayed their retirement, this option would not keep Medicare's net costs below 4.2 percent of GDP (see Table 7-4). Although it would reduce Medicare's costs somewhat, it would do nothing to reduce total health care costs for people who would be eligible for Medicare under current law. Further, it would lengthen the period of time during which those opting for early retirement under Social Security (at age 62) might have difficulty getting insurance coverage. Most people who retire early now retain employment-based coverage, either through their own or their

spouse's employer. Thus, one effect of this approach would be to shift costs now paid by Medicare to employers who offer health insurance. Another effect might be to increase the number of applications for disability from the affected population, thereby reducing the savings that Medicare might otherwise realize.

Collect More in Premiums or Taxes from Medicare Enrollees

Premiums paid by Medicare enrollees currently cover only about 10 percent of the average benefit paid by Medicare through the HI and SMI programs, a share that is expected to drop after 1998 under current law. If, instead, collections from beneficiaries were gradually increased to cover 50 percent of Medicare's HI and SMI costs by 2010, net costs would not exceed 4.2 percent of GDP until after 2060 (see Table 7-5).

Higher collections could be achieved by raising premiums for all enrollees, regardless of their circumstances. But such a rise could impose financial hardship on lower-income enrollees who are not eligible for Medicaid and would increase Medicaid costs for Medicare enrollees who were also receiving Medicaid benefits. One alternative would vary the amounts collected from enrollees on the basis of their financial resources. For example, the current flat premium might be replaced with a sliding-scale premium (or an income surtax on Medicare enrollees) that would collect an average of 50 percent of Medicare's costs, but the value of which would vary directly with enrollees' income. It might be set at zero or nominal amounts for enrollees with the lowest income, at 100 percent of Medicare's insurance value for those with income above a certain high threshold, and at intermediate amounts for middle-income enrollees. That approach would collect more from enrollees who could afford to pay more and would eliminate premium costs for the lowest-income enrollees, thereby incorporating into Medicare's structure part of the subsidy for low-income enrollees now provided through Medicaid.

Such an approach would keep net costs within the limits specified, but only by shifting more costs to enrollees and only if growth in health care costs slowed after 2010 as assumed by the trustees. It would do little or nothing to induce slower growth, however. Currently, premiums paid by Medicare enrollees are an average of about 3.4 percent of their per capita income. Under this approach, Medicare's premiums would consume 25 percent to 30 percent of enrollees' income each year after 2015. Those costs for Medicare enrollees could be reduced only by spreading them over a larger (non-Medicare) population, or slowing the growth in health care costs by more than the trustees assumed.

Table 7-4.
Medicare Enrollment and Costs Projected to 2070, Assuming Age of Eligibility Is Increased to 70 by 2032 (In percent)

Calendar Year	Enrollment as a Percentage of Population	Costs as a Percentage of GDP	Premiums as a Percentage of GDP	Net Costs as a Percentage of GDP	Premiums as a Percentage of: Medicare Costs	Premiums as a Percentage of: Enrollee Income[a]
1995	13.6	2.6	0.3	2.3	11.0	3.4
2010	14.9	4.4	0.3	4.2	5.9	2.8
2030	17.7	6.0	0.2	5.7	4.0	2.2
2050	17.5	6.1	0.2	5.9	3.1	1.7
2070	19.1	6.7	0.2	6.5	2.5	1.4

SOURCE: Congressional Budget Office based on the Medicare trustees' reports for 1995.

a. Enrollees' average income is assumed to increase at the same rate as gross domestic product (GDP) per capita.

Slow the Growth in Medicare's Costs per Enrollee

There are three general approaches by which the growth in Medicare's costs might be slowed, at least temporarily. One that has been used extensively in the past decade would reduce the rates paid to Medicare providers. Another, and one that has not been used much, would increase the cost-sharing requirements that beneficiaries must pay. A third, which was the focal point of some Medicare proposals last year, would restructure the Medicare market to give patients and providers greater incentives to make cost-effective health care choices.

Reduce Payment Rates. Rates for Medicare's fee-for-service providers normally increase each year in line with an index of costs. If the Congress elects to update rates by less than increases in the relevant cost indexes, payment rates will be lower than those that Medicare would have paid in the absence of Congressional action. Typically, however, not all of the potential savings to Medicare from lower payment rates are realized because providers are able to offset part of their potential loss in receipts from Medicare by increasing the volume of services for which they bill. Nevertheless, reducing payment rates can reduce both federal and total health care costs for Medicare because providers are generally unable to offset all of their potential loss in receipts, at least from Medicare patients alone. If lower payment rates reduced Medicare's fee-for-service costs, payment rates to HMOs would also be reduced under current law because those rates are based on Medicare's costs per enrollee in the fee-for-service sector.

One undesirable aspect of cutting payment rates is that some providers may try to maintain revenues by shifting costs to other payers, although their ability to do so is lessening as private insurers adopt more aggressive rate-setting policies of their own. Medicare enrollees' access to care could be threatened if the program's rates fell too far below those paid by other insurers, but few people seem to have had trouble obtaining care so far, even though current estimates indicate that Medicare pays only 70 percent to 80 percent of the average rates that private insurers pay to hospitals and physicians.

Another undesirable aspect is that regulatory price-setting often results in inappropriate, and therefore inefficient, prices--either lower or higher than necessary to generate adequate response from providers. Although beneficiaries' problems with access would soon alert Medicare when its payment rates were too low, there is no comparable mechanism to alert Medicare when its payment rates are higher than necessary. In some geographic areas and for some services (durable medical

Table 7-5.
Medicare Enrollment and Costs Projected to 2070, Assuming Collections from Enrollees Are Increased to Cover 50 Percent of All Medicare Costs by 2010 (In percent)

Calendar Year	Enrollment as a Percentage of Population	Costs as a Percentage of GDP	Premiums as a Percentage of GDP	Net Costs as a Percentage of GDP	Premiums as a Percentage of	
					Medicare Costs	Enrollee Income[a]
1995	13.6	2.6	0.3	2.3	11.0	3.4
2010	15.1	4.5	2.3	2.3	50.0	23.5
2030	22.0	7.5	3.7	3.7	50.0	27.0
2050	22.9	8.1	4.0	4.0	50.0	28.0
2070	24.5	8.8	4.4	4.4	50.0	28.3

SOURCE: Congressional Budget Office based on the Medicare trustees' reports for 1995.

a. Enrollees' average income is assumed to increase at the same rate as gross domestic product (GDP) per capita.

equipment, for example) Medicare's current payment rates may be higher than market-based rates. Demonstration studies are planned to assess the feasibility of and potential savings from using competitive bidding to set some of Medicare's payment rates.

Increase Cost-Sharing Requirements. Higher cost-sharing requirements would reduce federal costs for Medicare, but the reduction would be achieved by shifting costs to enrollees without necessarily affecting total costs. Although cost-sharing requirements can, in principle, make enrollees more prudent consumers of health care, that effect is weak in the Medicare program because most enrollees have supplementary coverage. About 15 percent receive Medicaid benefits, which pay all their cost-sharing liabilities under Medicare. Another 70 percent have medigap, an HMO supplement, or non-HMO employment-based coverage. Medigap plans and HMOs typically cover all or most of Medicare's cost-sharing requirements. The only common exclusion (affecting about 40 percent of people with medigap coverage) is the $100 SMI deductible. Those who have employment-based plans typically pay the cost-sharing requirements of their private plan or Medicare, whichever is lower. Except for the deductible amount, which is generally higher than $100, employment-based plans typically have lower cost-sharing requirements than does Medicare. Thus, only an increase in the SMI deductible amount would be likely to reduce use of services by people who have private insurance supplements; no change in Medicare's cost-sharing requirements would affect use of services by those who have Medicaid benefits; and any increase in cost-sharing requirements would reduce use of services by the 15 percent of enrollees who have no supplement.

To illustrate the way in which supplementary coverage negates the effects of Medicare's cost-sharing requirements on use of services, consider the following: increasing the SMI deductible amount to $1,000 a year would reduce federal costs for Medicare by an estimated 8 percent for 1997, but total costs would drop by less than 0.5 percent, given current supplementation patterns. Thus, almost all of the effect is a shift of costs from Medicare to enrollees, with very little reduction in use of services. By contrast, if current requirements for medigap plans were changed so that they could only cap enrollees' liabilities for cost-sharing under Medicare at $1,000 a year, rather than covering them all, both federal and total costs for Medicare would fall by about 5 percent, caused entirely by a reduction in the use of services.

Restructure the Medicare Market. Restructuring the Medicare market would, in one approach, involve setting up a system of competing health care plans of which Medicare's traditional fee-for-service sector would be just one. In this restructured market, all plans would offer at least a specified basic-benefit package. Plans could offer optional supplements to their basic package, but no plan could offer supplements to another plan's basic package. In the absence of that restriction, plans could offer supplemental coverage only, as medigap plans do now. But medigap insurers do not bear the full costs of the coverage they offer, because most of the costs of the additional services that people with medigap coverage use are imposed on Medicare--the insurer providing coverage for the basic-benefit package. By permitting supplemental coverage only when it is linked to a basic-benefit package offered by the same insurer, the external costs generated by medigap plans under current law would be internalized--that is, borne by the medigap insurer.

Thus, if insurers who were currently offering medigap plans wanted to continue to serve the Medicare market, they would have to offer full coverage for Medicare's basic package along with their supplemental benefits, on the same basis as all other plans serving the Medicare market. Under current law, there are significant differences in the constraints imposed on HMOs and medigap plans, both of which supplement the basic Medicare benefit package. For example, HMOs must offer community-rated premiums to all Medicare enrollees and may impose no coverage exclusions for preexisting conditions. Medigap plans may rate their premiums on the basis of age, base premiums on risk status for those who enroll after the first six months of Medicare eligibility, and impose a six-month coverage exclusion for preexisting conditions.

Enrollees could choose the benefit and premium package they preferred from the menu of plans available in their area during an annual open-enrollment period. Medicare would contribute a fixed amount per enrollee toward the premiums charged by plans. (Actual payments from Medicare to the plans would have to be risk-adjusted to discourage competition based on risk rather than price and quality. From the enrollees' perspective, however, Medicare's contribution toward

their premiums would not be risk-adjusted as long as plans were required to set community-rated premiums, as they are under current law.) Enrollees would be responsible for any excess premium amounts or would receive rebates for plans costing less than Medicare's contribution. Thus, Medicare's method of contribution toward enrollees' health plan costs would give enrollees financial incentives to be prudent purchasers of health plans, and the comparative information provided during the open-enrollment period would enable them to select the lowest-cost plan that would meet their needs. Because plans would be at risk for any costs above their predetermined premium collections, they would have financial incentives to limit unnecessary services, either through provider controls or cost-sharing requirements on beneficiaries.

Medicare's contribution could be set in one of two ways: equal to the premium charged by the lowest-cost basic-benefit plan in each area, or equal to some value set independently of actual plan costs. In the former case, Medicare would continue to guarantee a defined benefit, and taxpayers would bear the financial costs if health care costs increased more rapidly than expected. In the latter case, Medicare would offer only a defined contribution, with no assurance that the contribution would be sufficient to purchase the basic-benefit package. Under the latter approach, Medicare could be certain of controlling its costs because the financial risks from higher growth in health care costs would be shifted to enrollees.

Either approach would make both enrollees and providers more prudent in the use of health care services, although the incentives would be stronger under the defined contribution approach. Out-of-pocket premiums would be higher for Medicare beneficiaries who chose to remain in loosely managed plans compared with those in tightly managed plans, thereby accelerating the movement of enrollees to HMOs that is already occurring.

Medicare's fee-for-service plan would have to become more efficient to keep its supplemental premium at a competitive level. Gains in efficiency would have to be large enough to offset any loss in the substantial leverage that Medicare currently has in setting providers' fees (including balance-billing limits). Medicare's leverage would weaken as its fee-for-service enrollment fell as a share of the patient population in an area.

Given a coordinated open-enrollment period and the new pricing system, competition among plans for enrollment would intensify. If methods for risk-adjusting payments among plans were adequate, competition would be focused on providing services more efficiently rather than on enrolling low-cost beneficiaries. Consequently, growth in both federal and total costs per enrollee might be slowed compared with growth under current law.

For example, Medicare's defined contribution could be set equal to net costs per enrollee in 2000 (adjusted for geographic differences in costs), and increased only by specified percentages in later years regardless of growth in health care costs. A delay of a few years would probably be necessary to give Medicare time to transform its fee-for-service sector into a health plan capable of competing with other risk-based plans serving Medicare enrollees. Some lead time would also be necessary before a coordinated open-enrollment period could be put into effect.

The savings potential of this approach could be increased gradually. In the illustrative option here, federal savings through 2000 would be generated by keeping the SMI premium at 25 percent of SMI costs, rather than letting it drop after 1998 as under current law. The amount of Medicare's contribution in 2000 to enrollees' health plan premiums would then be increased by 6 percent a year through 2005, by 5 percent a year through 2010, and by 4.3 percent a year thereafter.

Although the effects of this defined contribution approach on federal costs can be predicted with some certainty, its effects on total costs for the basic-benefit package--and therefore on the costs that enrolleeswould bear--is quite uncertain. One effect seems clear, though. It would reduce the rate of growth in health care costs from current levels because, if it did not, enrollees' premium costs would eventually exceed their income.

If this approach reduced the average rate of growth in total costs per enrollee only to the rate assumed by the trustees in their long-term projections (5.4 percent a year), enrollees' premiums as a percentage of average income would increase from 3.4 percentage in 1995 to about 35 percent in 2070 (see Table 7-6, top panel). It seems likely, however, that some plans in each area would endeavor to offer the basic-benefit package for premiums equal to Medicare's defined contribution, so

Table 7-6.
Medicare Enrollment and Costs Projected to 2070, Assuming an Annual Increase of 4.3 Percent in Medicare's Defined Contribution After 2010 (In percent)

Calendar Year	Enrollment as a Percentage of Population	Costs as a Percentage of GDP	Premiums as a Percentage of GDP	Net Costs as a Percentage of GDP	Premiums as a Percentage of: Medicare Costs	Premiums as a Percentage of: Enrollee Income[a]
			Assuming Average Growth in Costs per Enrollee Is 5.4 Percent a Year After 2010			
1995	13.6	2.6	0.3	2.3	11.0	3.4
2010	15.1	4.5	1.3	3.2	28.6	13.5
2030	22.0	7.5	3.3	4.2	44.2	23.9
2050	22.9	8.1	4.4	3.7	54.2	30.3
2070	24.5	8.8	5.4	3.4	61.2	34.6
			Assuming Average Growth in Costs per Enrollee Is 4.3 Percent a Year After 2010			
1995	13.6	2.6	0.3	2.3	11.0	3.4
2010	15.1	3.6	0.4	3.2	10.3	3.8
2030	22.0	4.7	0.5	4.2	10.3	3.4
2050	22.9	4.1	0.4	3.7	10.3	2.9
2070	24.5	3.8	0.4	3.4	10.3	2.5

SOURCE: Congressional Budget Office based on the Medicare trustees' reports for 1995.

NOTE: Medicare's per-enrollee contribution in 2000 is set at total per capita Medicare costs minus 25 percent of costs for Supplementary Medical Insurance. The per-enrollee contribution for 2000 is increased by 6 percent a year through 2005, by 5 percent a year through 2010, and by 4.3 percent a year thereafter.

a. Enrollees' average income is assumed to increase at the same rate as gross domestic product (GDP) per capita.

that there would be no supplemental premium to collect. Enrollees in those plans would be liable only to Medicare for the basic premium equal to 25 percent of SMI costs, or 10 percent of total Medicare costs. In that case, enrollees' premiums would fall somewhat over time as a share of income (see Table 7-6, bottom panel).

If some plans were able to reduce the rate of growth in total costs per enrollee to the 4.3 percent annual increase in Medicare's defined contribution through increased efficiency alone, those plans would probably dominate the Medicare market. If improvements in efficiency did not cut costs sufficiently, so low-cost plans had to restrict access or reduce the quality of their services, a two-tier Medicare market would probably develop. Lower-income enrollees would tend to choose the low-cost plans where access and quality were poor, while higher-income enrollees would be more likely to opt for more expensive plans with less severe restrictions.

Conclusions About Medicare

The effects of the three general approaches discussed above are compared in Figures 7-4 and 7-5 under the assumption that, even under current law, average annual growth in Medicare's costs per enrollee will slow after 2010 from nearly 8 percent to the 5.4 percent rate assumed by Medicare's trustees in their 1995 report. It is important to remember, however, that only the third approach would put into effect policies specifically intended to achieve slower growth in total costs per enrollee. The first approach would reduce costs by re-

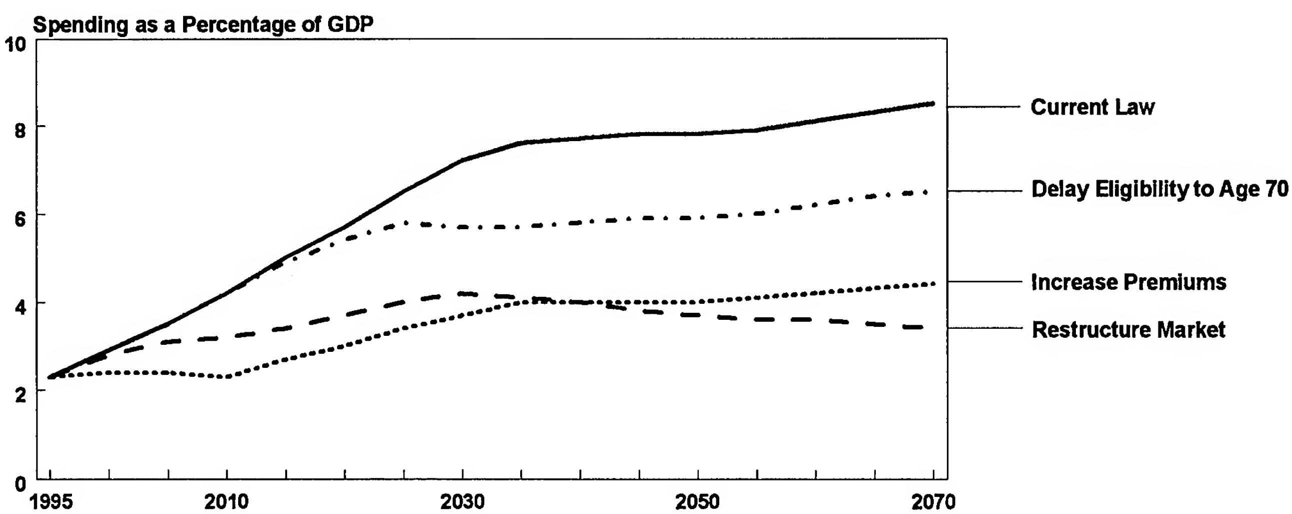
ducing enrollment, with no significant effect on growth in costs per enrollee. The second approach would reduce net federal costs, but not total costs, by increasing premiums paid by enrollees without fundamentally changing the Medicare market.

The first approach would reduce total enrollment in Medicare by delaying the age of eligibility to 70, phased in from 2003 through 2032. Compared with current law, that would reduce Medicare's net costs by about 20 percent in 2030 and by 24 percent in 2070. Nevertheless, net costs would exceed the target--4.2 percent of GDP--every year after 2010 by generally increasing amounts. Enrollees' premiums would be unaffected under current law, because after 1998 they would be indexed to the cost-of-living adjustment for Social Security benefits. Premiums would fall somewhat as a percentage of Medicare's costs and enrollees' income, however, because both average costs and income for enrollees would be slightly higher under this approach--the result of delayed enrollment.

The second approach would increase enrollees' premiums to cover 50 percent of total Medicare costs by 2010, thereby reducing net Medicare costs by about 50 percent every year thereafter. There would be no effect, however, on growth in total costs for Medicare. Although enrollees' premiums are currently less than 4 percent of their average income, under this plan premiums would rise to nearly 30 percent of enrollees' average income by 2030, remaining around that level thereafter. Unless the premium was related to income, it would equal or exceed income for low-income enrollees not receiving Medicaid benefits.

The third approach would restructure the Medicare market, making its fee-for-service sector just one of a number of competing plans serving enrollees. Enrollees would receive a fixed federal contribution toward the premium costs of the plan they selected and would have to pay any excess premium costs out of pocket. Medicare's defined contribution would be set equal to net costs per enrollee in 2000, increased by 6 percent a year through 2005, by 5 percent a year through 2010, and by 4.3 percent a year thereafter. This plan would establish control over federal costs for Medicare on a per-enrollee basis and would keep net federal costs for Medicare at or below 4.2 percent of GDP. Compared with costs under current law, net Medicare costs would be reduced by more than 40 percent in 2030 and by 60 percent in 2070.

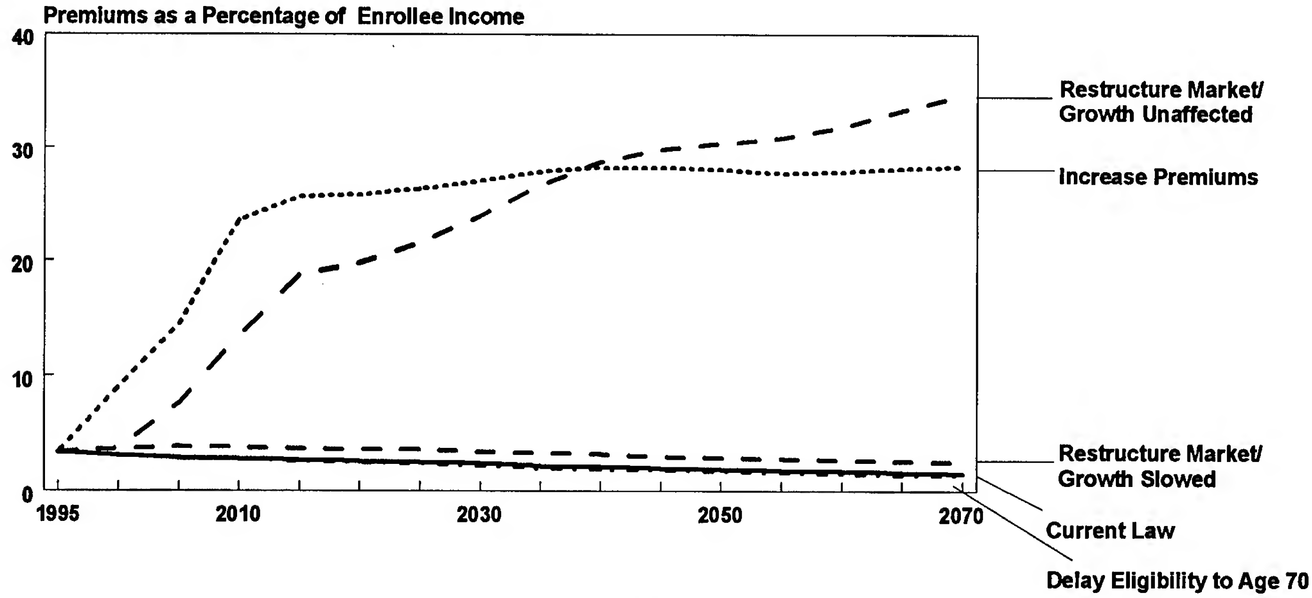
Figure 7-4.
Net Medicare Costs as a Percentage of GDP Under Alternative Options



SOURCE: Congressional Budget Office based on the Medicare trustees' reports for 1995.

NOTE: Data are plotted at five-year intervals.

Figure 7-5.
Premiums as a Percentage of Enrollee Income Under Alternative Options



SOURCE: Congressional Budget Office based on the Medicare trustees' reports for 1995.

NOTES: Data are plotted at five-year intervals.

Although they appear similar, the values for delaying eligibility are slightly below those for current law from 2015 on.

The effect of the third approach on enrollees is uncertain, however. If the incentives that this approach would generate for more cost-conscious behavior reduced annual growth in total costs per enrollee only to the rate assumed by Medicare's trustees (5.4 percent after 2010), enrollees' premiums would steadily increase, reaching 24 percent of their average income by 2030 and 35 percent by 2070. If, instead, growth in costs per enrollee slowed to match annual growth in the federal defined contribution (4.3 percent), enrollees' premiums would be only 2.5 percent of average income in 2070.

In practice, the effects of the third approach would probably differ among various enrollee groups. Some basic plans would keep their costs low enough to avoid having to charge a supplemental premium above the basic Part B premium paid by all enrollees, but the access and quality of services available in those plans might limit their appeal only to low-income enrollees. Higher-income enrollees might gravitate instead to plans that charged supplemental premiums and provided better access and quality.

The approaches discussed here are not necessarily mutually exclusive. For example, by both delaying the age of eligibility and introducing a defined federal contribution, growth in the federal contribution might be set somewhat higher than 4.3 percent a year after 2010 while still keeping net Medicare costs at or below 4.2 percent of GDP. The one certainty is that Medicare will soon consume an enormous share of national income unless significant changes are made in the program.

Appendixes

Appendix A

Estimated Savings from the Administration's 1997 Request for Selected National Defense Options

In its fiscal year 1997 budget request, the Administration has proposed significant changes to its plan that would affect savings from some of the defense options presented in Chapter 3. Those savings are shown in Table A-1.

Table A-1.
Estimated Savings from the Administration's 1997 Plan for Selected Department of Defense Options

Savings from the 1997 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
DEF-08 CANCEL THE UPGRADE OF THE NAVY'S F/A-18 FIGHTER AND BUY THE CURRENT MODEL							
Budget Authority	2,052	2,125	2,195	2,307	1,718	2,467	12,863
Outlays	430	1,025	1,649	1,952	2,043	2,051	9,150
DEF-09 CANCEL THE MARINE CORPS'S V-22 AIRCRAFT PROGRAM AND BUY CH-53E HELICOPTERS							
Budget Authority	1,003	926	810	797	1,255	1,870	6,660
Outlays	371	664	713	660	719	970	4,097
DEF-11 CANCEL THE AIR FORCE'S F-22 AIRCRAFT PROGRAM							
Budget Authority	2,007	2,301	2,504	2,965	3,843	4,596	18,216
Outlays	932	1,813	1,786	1,681	1,930	2,366	10,509

(Continued)

Table A-1.
Continued

Savings from the 1997 Plan	Annual Savings (Millions of dollars) 1997	1998	1999	2000	2001	2002	Six-Year Cumulative Total
DEF-12 BUY NO MORE THAN 40 C-17s AND BUY COMMERCIAL AIRLIFTERS INSTEAD							
Budget Authority	2,191	1,589	1,473	1,241	815	795	8,103
Outlays	173	685	1,251	1,468	1,519	1,474	6,569
DEF-13 DEFER MODERNIZATION OF TACTICAL AIRLIFT							
Budget Authority	72	117	114	119	114	132	668
Outlays	4	25	59	88	104	111	391
DEF-22 CUT SPENDING FOR DUAL-USE TECHNOLOGY PROGRAMS TO HISTORICAL LEVELS							
Budget Authority	123	108	126	100	107	136	700
Outlays	53	96	113	109	105	118	594
DEF-38 CONSOLIDATE PILOT TRAINING AND DELAY BUYING THE JOINT PRIMARY AIRCRAFT TRAINING SYSTEM							
Budget Authority	108	138	209	272	266	395	1,388
Outlays 2	83	147	244	290	400	1,166	

Appendix B

Spending Options by Budget Function

050 National Defense

300 Natural Resources and Environment

350 Agriculture

370 Commerce and Housing Credit

400 Transportation

450 Community and Regional Development

500 Education, Training, Employment, and Social Services

550 Health

See Chapter 6 for short-term options for Medicaid.

570 Medicare

See Chapters 6 and 7 for short- and long-term options.

600 Income Security

Glossary

This glossary defines economic and budgetary terms as they relate to this report. Some entries sacrifice precision for brevity and clarity to the lay reader. Where appropriate, sources of data for economic variables are indicated as follows:

- BLS denotes the Bureau of Labor Statistics in the Department of Labor;
- CBO denotes the Congressional Budget Office;
- FRB denotes the Federal Reserve Board; and
- NBER denotes the National Bureau of Economic Research.

adjustable-rate mortgage: Mortgage whose interest rate is not fixed for the life of the mortgage but varies in a predetermined way with movements in a specified market interest rate.

aggregate demand: Total purchases of a country's output of goods and services by consumers, businesses, government, and foreigners during a given period. (Bureau of Economic Analysis)

appropriation act: A statute under the jurisdiction of the House and Senate Committees on Appropriations that provides budget authority. Enactment generally follows adoption of authorizing legislation unless the authorization itself provides the budget authority. Currently, 13 regular appropriation acts are enacted each year. When necessary, the Congress may enact supplemental or continuing appropriations.

authorization: A substantive law that sets up or continues a federal program or agency. Authorizing legislation is normally a prerequisite for appropriations. For some programs, the authorizing legislation itself provides the authority to incur obligations and make payments.

Balanced Budget and Emergency Deficit Control Act of 1985: Also known as Gramm-Rudman-Hollings or the Balanced Budget Act, this law set forth specific deficit targets and a sequestration procedure to reduce spending if the targets were exceeded. The Budget Enforcement Act of 1990 established new budget procedures through fiscal year 1995 as well as revised targets, which exclude the Social Security trust funds. The Omnibus Budget Reconciliation Act of 1993 further extended various provisions of the Balanced Budget Act, without including fixed deficit targets beyond fiscal year 1995. See **discretionary spending caps** and **pay-as-you-go**.

baseline: A benchmark for measuring the budgetary effects of proposed changes in federal revenues or spending. As specified in the Budget Enforcement Act of 1990 (BEA), the baseline for revenues and entitlement spending generally assumes that laws now on the statute books will continue. The discretionary spending projections are based on the discretionary spending caps set by the BEA in 1995 through 1998. The *baseline with discretionary inflation* adjusts discretionary appropriations for inflation; the *baseline without discretionary inflation* does not.

***Blue Chip* consensus forecast:** The average of about 50 economic forecasts surveyed by Eggert Economic Enterprises, Inc.

budget authority: Legal authority to incur financial obligations that will result in the spending of federal government funds. Budget authority may be provided in an authorization or an appropriation act. Offsetting collections, including offsetting receipts, constitute negative budget authority.

budget deficit: Amount by which budget outlays exceed budget revenues during a given period.

Budget Enforcement Act of 1990 (BEA): Title XIII of the Omnibus Budget Reconciliation Act of 1990. This act amended both the Congressional Budget Act of 1974 and the Balanced Budget and Emergency Deficit Control Act of 1985. The BEA provided for new budget targets, sequestration procedures, pay-as-you-go procedures, credit reform, and various other changes. The discretionary spending caps and the pay-as-you-go process were extended through 1998 by the Omnibus Budget Reconciliation Act of 1993. See **discretionary spending caps** and **pay-as-you-go**.

budget function: One of 20 areas into which federal spending and credit activity are divided. National needs are grouped into 17 broad budget functions, including national defense, international affairs, energy, agriculture, health, income security, and general government. Three functions--net interest, allowances, and undistributed offsetting receipts--do not address national needs but are included to complete the budget.

budget resolution: A resolution, passed by both Houses of Congress, that sets forth a Congressional budget plan for the next five years. The plan must be carried out through subsequent legislation, including appropriations and changes in tax and entitlement laws. The resolution sets guidelines for Congressional action, but it is not signed by the President and does not become law. The Congressional Budget Act of 1974 established a number of mechanisms that are designed to hold spending and revenues to the targets established in the budget resolution.

budgetary resources: All sources of budget authority that are subject to sequestration. Budgetary resources include new budget authority, unobligated balances, direct spending authority, and obligation limitations. See **sequestration**.

business cycle: Fluctuations in overall business activity accompanied by swings in the unemployment rate, interest rates, and profits. Over a business cycle, real activity rises to a peak (its highest level during the cycle), then falls until it reaches its trough (its lowest level following the peak), whereupon it starts to rise again, defining a new cycle. Business cycles are irregular, varying in frequency, magnitude, and duration. (NBER)

capacity constraints: Limits on the amount of output that can be produced without also significantly increasing prices. Causes of capacity constraints include shortages of skilled labor or of capital needed for production.

capacity utilization rate: The seasonally adjusted output of the nation's factories, mines, and electric and gas utilities expressed as a percentage of their capacity to produce output. Capacity is defined as the greatest output a plant can maintain with a normal work pattern. (FRB)

capital: *Physical capital* is the output that has been set aside to be used in production rather than consumed. According to the national income and product accounts, private capital goods are composed of residential and nonresidential structures, producers' durable equipment, and business inventories. *Financial capital* is the funds raised by an individual, business, or government by issuing securities, such as a mortgage, stock certificate, or bond. *Human capital* is a term for education, training, health, and other attributes of the workforce that increase its ability to produce goods and services.

central bank: A government-established agency responsible for conducting monetary policy and overseeing credit conditions. The Federal Reserve System fulfills those functions in the United States.

chain-type GDP price index: An overall measure of the price level in which the calculation of the change in prices uses the composition of output in adjoining years. This price index is currently set to equal one in 1992. Because this measure uses the composition of output in adjoining years, it is a more accurate measure of the way in which price change affects economic welfare than either the GDP implicit deflator or the fixed-weighted GDP price index. Compare with **implicit deflator** and **fixed-weighted price index**. (Bureau of Economic Analysis)

chained (1992) GDP: A measure of real economic output (economic output adjusted to remove the effects of inflation) in which prices in adjoining years are used to calculate the growth rate for total output. Chained (1992) GDP is set to equal nominal GDP in 1992. Because this measure uses prices in recent periods, it is a more accurate measure of real growth than traditional constant-dollar measures that use prices for a specific base year. See **gross domestic product (GDP)** and **constant dollar**. (Bureau of Economic Analysis)

civilian unemployment rate: Unemployment as a percentage of the civilian labor force--that is, the labor force excluding armed forces personnel. (BLS)

commercial paper: Short-term, unsecured debt obligations that are issued by large corporations with good credit ratings and that are actively traded in financial markets. By selling such obligations, issuers of commercial paper borrow directly from the public rather than indirectly through financial intermediaries such as commercial banks.

compensation: All income due to employees for their work during a given period. Compensation includes wages and salaries as well as fringe benefits and employers' share of social insurance taxes. (Bureau of Economic Analysis)

constant dollar: Measured in terms of prices of a base period to remove the effects of inflation. Compare with **current dollar**.

consumer confidence: A measure of consumer attitudes and buying plans indicated by an index of consumer sentiment. One such index is constructed by the University of Michigan Survey Research Center based on surveys of consumers' views of the state of the economy and their personal finances, both current and prospective.

consumer durable goods: Goods bought by households for their personal use that, on average, last more than three years--for example, automobiles, furniture, or appliances.

consumption: Total purchases of goods and services during a given period by households for their own use. (Bureau of Economic Analysis)

cost of capital: The total expected rate of return that an investment must generate in order to provide investors with the prevailing market yield consistent with risk after accounting for corporate taxes (if applicable) and depreciation.

countercyclical: Acting to moderate the ups and downs of the business cycle.

CPI-U: An index of consumer prices based on the typical market basket of goods and services consumed by all urban consumers during a base period--currently 1982 through 1984. (BLS)

credit crunch: A significant, temporary decline in the normal supply of credit, usually caused by tight monetary policy or a regulatory restriction on lending institutions.

credit reform: A revised system of budgeting for federal credit activities that focuses on the cost of subsidies conveyed in federal credit assistance. The system was authorized by the Federal Credit Reform Act of 1990, which was part of the Budget Enforcement Act of 1990.

credit subsidies: The estimated long-term costs to the federal government of direct loans or loan guarantees calculated on the basis of net present value, excluding administrative costs and any incidental effects on governmental receipts or outlays. For direct loans, the subsidy cost is the net present value of loan disbursements minus repayments of interest and principal, adjusted for estimated defaults, prepayments, fees, penalties, and other recoveries. For loan guarantees, the subsidy cost is the net present value of the estimated payments by the government to cover defaults and delinquencies, interest subsidies, or other payments, offset by any payments to the government, including origination and other fees, penalties, and recoveries. See **present value**.

currency value: See **exchange rate**.

current-account balance: The net revenues that arise from a country's international sales and purchases of goods and services, net international transfers (public or private gifts or donations), and net factor income (primarily capital income from foreign-located property owned by residents minus capital income from domestic property owned by nonresidents). The current-account balance differs from net exports in that it includes international transfers and net factor income. (Bureau of Economic Analysis)

current dollar: Measured in the dollar value--reflecting prices that prevailed then--of the period under consideration. Compare with **constant dollar**.

cyclical deficit: The part of the budget deficit that results from cyclical factors rather than from underlying fiscal policy. The cyclical deficit reflects the fact that, when GDP falls, revenues automatically fall and outlays automatically rise. By definition, the cyclical deficit is zero when the economy is operating at potential GDP. Compare with **standardized-employment deficit**. (CBO)

debt held by the public: Debt issued by the federal government and held by nonfederal investors (including the Federal Reserve System).

debt restructuring: Changing the characteristics, such as maturity or interest rate, of an entity's outstanding debt. Such changes can be effected by issuing long-term debt and retiring short-term debt (or vice versa), or by negotiating with creditors.

debt service: Payment of scheduled interest obligations on outstanding debt.

deflator: See **implicit deflator**.

deposit insurance: The guarantee by a federal agency that an individual depositor at a participating depository institution will receive the full amount of the deposit (up to $100,000) if the institution becomes insolvent.

depository institutions: Financial intermediaries that make loans to borrowers and obtain funds from savers by accepting deposits. Depository institutions are commercial banks, savings and loan institutions, mutual savings banks, and credit unions.

depreciation: Decline in the value of a currency, financial asset, or capital good. When applied to a capital good, depreciation usually refers to loss of value because of obsolescence or wear.

direct spending: The Budget Enforcement Act of 1990 defines direct spending as (a) budget authority provided by an authorization, (b) entitlement authority (including mandatory spending contained in appropriation acts), and (c) the Food Stamp program. A synonym is **mandatory spending**. Compare with **discretionary spending**.

discount rate: The interest rate the Federal Reserve System charges on a loan that it makes to a bank. Such loans, when allowed, enable a bank to meet its reserve requirements without reducing its loans.

discouraged workers: Jobless people who are available for work but who are not actively seeking it because they think they have poor prospects of finding jobs. Because they are not actively seeking jobs, discouraged workers are not counted as part of the labor force or as being unemployed. (BLS)

discretionary spending: Spending for programs whose funding levels are determined through the appropriation process. The Congress has the discretion each year to determine how many dollars will be devoted to continuing current programs and funding new ones. Compare with **direct spending**.

discretionary spending caps: Annual ceilings through fiscal year 1998 on budget authority and outlays for discretionary programs defined in the Balanced Budget Act of 1985, as amended by the Budget Enforcement Act of 1990 and the Omnibus Budget Reconciliation Act of 1993. One cap covers appropriations from the Violent Crime Reduction Trust Fund. A separate cap covers all other (that is, general-purpose) discretionary spending. Discretionary spending caps are enforced through Congressional rules and sequestration procedures.

disposable (personal) income: Income received by individuals, including transfer payments, minus personal taxes and fees paid to government. (Bureau of Economic Analysis)

domestic demand: Total purchases of goods and services, regardless of origin, by U.S. consumers, businesses, and governments during a given period. Domestic demand equals gross domestic product minus net exports. (Bureau of Economic Analysis)

entitlements: Programs that make payments to any person, business, or unit of government that seeks the payments and meets the criteria set in law. The Congress controls these programs indirectly by defining eligibility and setting the benefit or payment rules. Although the level of spending for these programs is controlled by the authorizing legislation, funding may be provided in either an authorization or an appropriation act. The best-known entitlements are the major benefit programs, such as Social Security and Medicare. See **direct spending.**

excess reserves: Total monetary reserves in excess of required reserves. See **monetary reserves** and **reserve requirements**.

exchange rate: The number of units of a foreign currency that can be bought with one unit of the domestic currency. (FRB)

excise tax: A tax levied on the purchase of a specific type of good or service, such as tobacco products or telephone services.

expansion: A phase of the business cycle that extends from a trough to the next peak. See **business cycle**. (NBER)

federal funds: See **trust fund**.

federal funds rate: Overnight interest rate at which financial institutions borrow and lend monetary reserves. A rise in the federal funds rate (compared with other short-term rates) suggests a tightening of monetary policy, whereas a fall suggests an easing. (FRB)

Federal Open Market Committee (FOMC): The group within the Federal Reserve System that determines the direction of monetary policy. The open market desk at the Federal Reserve Bank of New York implements the policy with open market operations--the purchase or sale of government securities--which influence short-term interest rates

and the growth of the money supply. The FOMC is composed of 12 members, including the seven members of the Board of Governors of the Federal Reserve System and five of the 12 presidents of the regional Federal Reserve Banks.

Federal Reserve System: As the central bank of the United States, the Federal Reserve is responsible for conducting the nation's monetary policy and overseeing credit conditions.

final sales to domestic purchasers: Gross domestic product minus both net exports and the change in business inventories during a given period. (Bureau of Economic Analysis)

financial intermediary: An institution that indirectly matches borrowers with lenders. For example, depository institutions, such as commercial banks or savings and loan institutions, lend funds that they have accepted from depositors. Nondepository institutions, such as life insurance companies or pension funds, lend or invest funds that they hold in reserve against future claims by policyholders or participating retirees.

financing account: Any account established under credit reform to finance the portion of federal direct loans and loan guarantees not subsidized by federal funds. Since these accounts are used only to finance the nonsubsidized portion of federal credit activities, they are excluded from the federal budget and considered a means of financing the deficit.

fiscal policy: The government's choice of tax and spending programs, which influences the amount and maturity of government debt as well as the level, composition, and distribution of national output and income. An "easy" fiscal policy stimulates the short-term growth of output and income, whereas a "tight" fiscal policy restrains their growth. Movements in the standardized-employment deficit constitute one overall indicator of the tightness or ease of federal fiscal policy; an increase relative to potential gross domestic product suggests fiscal ease, whereas a decrease suggests fiscal restriction. The President and the Congress jointly determine federal fiscal policy.

fiscal year: A yearly accounting period. The federal government's fiscal year begins October 1 and ends September 30. Fiscal years are designated by the calendar years in which they end--for example, fiscal year 1996 began October 1, 1995, and will end on September 30, 1996.

fixed-weighted price index: An index that measures the overall price level (compared with a base period) without being influenced by changes in the composition of output or purchases. Compare with **implicit deflator** and **chain-type GDP price index**.

GDP: See **gross domestic product**.

GDP gap: The difference between potential real GDP and real GDP, expressed as a percentage of potential real GDP. See **potential real GDP**.

GNP: See **gross national product**.

government purchases of goods and services: Purchases from the private sector (including compensation of government employees) made by government during a given period. Government purchases constitute a component of GDP, but they encompass only a portion of all government expenditures because they exclude transfer payments (such as grants to state and local governments and net interest paid). (Bureau of Economic Analysis)

government-sponsored enterprises: Enterprises established and chartered by the federal government to perform specific financial functions, usually under the supervision of a government agency, but in all cases wholly owned by stockholders rather than the government. Major examples are the Federal National Mortgage Association, the Student Loan Marketing Association, and the Federal Home Loan Banks.

grants: Transfer payments from the federal government to state and local governments or other recipients to help fund projects or activities that do not involve substantial federal participation.

grants-in-aid: Grants from the federal government to state and local governments to help provide for programs of assistance or service to the public.

gross domestic product (GDP): The total market value of all goods and services produced domestically during a given period. The components of GDP are consumption, gross domestic investment, government purchases of goods and services, and net exports. (Bureau of Economic Analysis)

gross investment: A measure of additions to the capital stock that does not subtract depreciation of existing capital.

gross national product (GNP): The total market value of all goods and services produced in a given period by labor and property supplied by residents of a country, regardless of where the labor and property are located. GNP differs from GDP primarily by including the excess of capital income that residents earn from investments abroad over capital income that nonresidents earn from domestic investment.

implicit deflator: An overall measure of the price level (compared with a base period) given by the ratio of current-dollar purchases to constant-dollar purchases. Changes in an implicit deflator, unlike those in a fixed-weighted price index, reflect changes in the composition of purchases as well as in the prices of goods and services purchased. See **fixed-weighted price index** and **chain-type GDP price index**. (Bureau of Economic Analysis)

index: An indicator or summary measure that defines the overall level (compared with a base) of some aggregate--such as the general price level or total quantity--in terms of the levels of its components.

inflation: Growth in a measure of the general price level, usually expressed as an annual rate of change.

infrastructure: Government-owned capital goods that provide services to the public, usually with benefits to the community at large as well as to the direct user. Examples include schools, roads, bridges, dams, harbors, and public buildings.

inventories: Stocks of goods held by businesses either for further processing or for sale. (Bureau of Economic Analysis)

investment: *Physical investment* is the current product set aside during a given period to be used for future production; in other words, an addition to the stock of capital goods. As measured by the national income and product accounts, private domestic investment consists of investment in residential and nonresidential structures, producers' durable equipment, and the change in business inventories. *Financial investment* is the purchase of a financial security. *Investment in human capital* is spending on education, training, health services, and other activities that increase the productivity of the workforce. Investment in human capital is not treated as investment in the national income and product accounts.

labor force: The number of people who have jobs or who are available for work and are actively seeking jobs. *Labor force participation rate* is the labor force as a percentage of the noninstitutional population age 16 years or older. (BLS)

liquidating account: Any budgetary account established under credit reform to finance direct loan and loan guarantee activities that were obligated or committed before October 1, 1992 (the effective date of credit reform).

liquidity: The characteristic of an asset that permits it to be sold on short notice with little or no loss in value. Ordinarily, a shorter term to maturity or a lower risk of default will enhance an asset's liquidity.

long-term interest rate: The interest rate earned by a note or bond that matures in 10 or more years.

M2: A measure of the U.S. money supply that consists of the nonbank public's holdings of currency, traveler's checks, and checking accounts (collectively known as M1); small (less than $100,000) time and savings accounts; money market deposit accounts held at depository institutions; most money market mutual funds; overnight repurchase agreements; and overnight Eurodollar accounts held by U.S. residents. (FRB)

mandatory spending: Another term for **direct spending**.

marginal tax rate: The tax rate that applies to an additional dollar of taxable income.

means of financing: Ways to finance federal deficits or use federal surpluses. The largest means of financing is normally federal borrowing from the public, but other means of financing include any transaction that causes a difference between the federal (including off-budget) surplus or deficit and the change in debt held by the public. The means of financing include changes in checks outstanding and Treasury cash balances, seigniorage (that is, government revenue from the manufacture of money), and the transactions of the financing accounts established under credit reform.

means-tested programs: Programs that provide cash or services to people who meet a test of need based on income and assets. Most means-tested programs are entitlements--for example, Medicaid, the Food Stamp program, Supplemental Security Income, family support, and veterans' pensions--but a few, such as subsidized housing and various social services, are funded through discretionary appropriations.

merchandise trade balance: Net exports of goods. The merchandise trade balance differs from net exports by excluding exports and imports of services. (Bureau of Economic Analysis)

monetary policy: The strategy of influencing movements of the money supply and interest rates to affect output and inflation. An "easy" monetary policy suggests faster money growth and initially lower short-term interest rates in an attempt to increase aggregate demand, but it may lead to a higher rate of inflation. A "tight" monetary policy suggests slower money growth and higher interest rates in the near term in an attempt to reduce inflationary pressure by reducing aggregate demand. The Federal Reserve System conducts monetary policy in the United States.

monetary reserves: The amount of funds that banks and other depository institutions hold as cash or as deposits with the Federal Reserve System. See **reserve requirements**.

money supply: Private assets that can readily be used to make transactions or are easily convertible into assets that can. See **M2**.

NAIRU (nonaccelerating inflation rate of unemployment): The unemployment rate consistent with a constant inflation rate. An unemployment rate greater than the NAIRU indicates downward pressure on inflation, whereas a lower unemployment rate indicates upward pressure on inflation. Estimates of the NAIRU are based on the historical relationship between inflation and the aggregate unemployment rate. CBO's procedures for estimating the NAIRU are described in Appendix B of *The Economic and Budget Outlook: An Update* (August 1994).

national income and product accounts (NIPAs): Official U.S. accounts that detail the composition of GDP and how the costs of production are distributed as income. (Bureau of Economic Analysis)

national saving: Total saving by all sectors of the economy: personal saving, business saving (corporate after-tax profits not paid as dividends), and government saving (budget surplus or deficit--indicating dissaving--of all government entities). National saving represents all income not consumed, publicly or privately, during a given period. (Bureau of Economic Analysis)

net exports: Exports of goods and services produced in a country minus its imports of goods and services produced elsewhere.

net interest: *In the federal budget*, net interest includes federal interest payments to the public as recorded in budget function 900. Net interest also includes, as an offset, interest income received by the government on loans and cash balances. *In the national income and product accounts* (NIPAs), net interest is the income component of GDP paid as interest--primarily interest that domestic businesses pay, minus interest they receive. The NIPAs treat government interest payments as transfers, so they are not part of GDP.

net national saving: National saving less depreciation of physical capital.

NIPAs: See **national income and product accounts**.

nominal: Measured in the dollar value (as in nominal output, income, or wage rate) or in market terms (as in nominal exchange or interest rate) of the period under consideration. Compare with **real**.

nonresidential structures: Primarily business buildings (such as industrial, office, and other commercial buildings) and structures (such as mining and well shafts). (Bureau of Economic Analysis)

off-budget: Spending or revenues excluded from the budget totals by law. The revenues and outlays of the two Social Security trust funds and the transactions of the Postal Service are off-budget and (except for discretionary Social Security administrative costs) are not included in any Budget Enforcement Act calculations.

offsetting receipts: Funds collected by the federal government that are recorded as negative budget authority and outlays and credited to separate receipt accounts. More than half of offsetting receipts are intragovernmental receipts that reflect agencies' payments to retirement and other funds on behalf of their employees; those receipts simply balance payments elsewhere in the budget. An additional category of receipts (proprietary receipts) come from the public and generally represent voluntary, business-type transactions. The largest items are the flat premiums for Supplementary Medical Insurance (Part B of Medicare), timber and oil lease receipts, and proceeds from the sale of electric power.

outlays: Spending to fulfill a federal obligation, generally by issuing a check or disbursing cash. Unlike outlays for other categories of spending, outlays for interest on the public debt are counted when the interest is earned, not when it is paid. Outlays may be for payment of obligations incurred in previous fiscal years or in the same year. Outlays, therefore, flow in part from unexpended balances of prior year budget authority and in part from budget authority provided for the current year.

pay-as-you-go (PAYGO): A procedure required in the Budget Enforcement Act of 1990 to ensure that, for fiscal years 1991 through 1995, legislation affecting direct spending and receipts did not increase the deficit. The pay-as-you-go process was extended through fiscal year 1998 by the Omnibus Budget Reconciliation Act of 1993. Pay-as-you-go is enforced through Congressional rules and sequestration procedures.

peak: See **business cycle**.

personal saving: Saving by households. Personal saving equals disposable personal income minus spending for consumption and interest payments. *Personal saving rate* is personal saving as a percentage of disposable personal income. (Bureau of Economic Analysis)

point-year of unemployment: An unemployment rate that is 1 percentage point above the NAIRU for one year. For example, if the unemployment rate averaged 2 percentage points above the NAIRU for one and one-half years, that would be three point-years of unemployment. See **NAIRU**.

potential real GDP: The highest level of real GDP that could persist for a substantial period without raising the rate of inflation. CBO's calculation relates potential GDP to the nonaccelerating inflation rate of unemployment, which is the unemployment rate consistent with a constant inflation rate. (CBO)

present value: A single number that expresses a flow of current and future income (or payments) in terms of an equivalent lump sum received (or paid) today. The calculation of present value depends on the rate of interest. For example, given an interest rate of 5 percent, today's 95 cents will grow to $1 next year. Hence, the present value of $1 payable a year from today is only 95 cents.

private saving: Saving by households and businesses. Private saving is equal to personal saving plus after-tax corporate profits minus dividends paid. (Bureau of Economic Analysis)

producers' durable equipment: Primarily nonresidential capital equipment--such as computers, machines, and transportation equipment--owned by businesses. (Bureau of Economic Analysis)

productivity: Average real output per unit of input. *Labor productivity* is average real output per hour of labor. The growth of labor productivity is defined as the growth of real output that is not explained by the growth of labor input alone. *Total factor productivity* is average real output per unit of combined labor and capital inputs. The growth of total factor productivity is defined as the growth of real output that is not explained by the growth of labor and capital. Labor productivity and total factor productivity differ in that increases in capital per worker would raise labor productivity but not total factor productivity. (BLS)

program account: Any budgetary account that finances credit subsidies and the costs of administering credit programs.

real: Adjusted to remove the effects of inflation. *Real (constant-dollar) output* represents volume, rather than dollar value, of goods and services. *Real income* represents power to purchase real output. *Real data* are usually constructed by dividing the corresponding nominal data, such as output or a wage rate, by a price index or deflator. *Real interest rate* is a nominal interest rate minus the expected inflation rate. Compare with **nominal**.

receipt account: Any budget or off-budget account that is established exclusively to record the collection of income, including negative subsidies. In general, receipt accounts that collect money arising from the exercise of the government's sovereign powers are included as revenues, whereas the proceeds of intragovernmental transactions or collections from the public arising from business-type transactions (such as interest income, proceeds from the sale of property or products, or profits from federal credit activities) are included as offsetting receipts--that is, credited as offsets to outlays rather than included in receipts.

recession: A phase of the business cycle extending from a peak to the next trough--usually lasting six months to a year --and characterized by widespread declines in output, income, employment, and trade in many sectors of the economy. Real GDP usually falls throughout a recession. See **business cycle**. (NBER)

reconciliation: A process the Congress uses to make its tax and spending legislation conform with the targets established in the budget resolution. The budget resolution may contain reconciliation instructions directing certain Congressional committees to achieve deficit reduction through changes in tax or spending programs under their jurisdiction. Legislation to implement the reconciliation instructions is usually combined in one comprehensive bill. The reconciliation process primarily affects taxes, entitlement spending, and offsetting receipts. As a general rule, decisions on discretionary programs are determined separately through the appropriation process, which is also governed by allocations in the budget resolution.

recovery: A phase of the business cycle that lasts from a trough until overall economic activity returns to the level it reached at the previous peak. See **business cycle**. (NBER)

reserve requirements: The amount of funds that banks and other depository institutions must hold as cash or as deposits with the Federal Reserve System. The Federal Reserve specifies reserve requirements depending on the level of deposits. Such requirements reduce the risk of bank failure and allow the Federal Reserve to influence the money supply. (FRB)

reserves: See **monetary reserves**.

residential investment: Investment in housing, primarily for construction of new single-family and multifamily housing and alterations plus additions to existing housing. (Bureau of Economic Analysis)

retained earnings: Corporate profits after tax that are used for investment rather than paid out as dividends to stockholders. (Bureau of Economic Analysis)

revenues: Funds collected from the public arising from the sovereign power of the government. Revenues consist of receipts from income taxes (individual and corporate), excise taxes, and estate and gift taxes; social insurance contributions; customs duties; miscellaneous receipts such as Federal Reserve earnings, gifts, and contributions; and fees and fines. Revenues are also known as federal governmental receipts but do not include offsetting receipts, which are recorded as negative budget authority and outlays.

sequestration: The cancellation of budgetary resources to enforce the discretionary spending caps and pay-as-you-go process established under the Budget Enforcement Act of 1990 and the Omnibus Budget Reconciliation Act of 1993. Sequestration is triggered if the Office of Management and Budget determines that discretionary appropriations exceed the discretionary spending caps or that legislation affecting direct spending and receipts increases the deficit. Changes in direct spending and receipt legislation that increase the deficit would result in reductions in funding for entitlements not otherwise exempted by law. Discretionary spending in excess of the caps would cause the cancellation of budgetary resources within the discretionary spending category.

short-term interest rate: The interest rate earned by a debt instrument that will mature within one year.

standardized-employment deficit: The level of the federal budget deficit that would occur under current law if the economy was operating at potential GDP. It provides a measure of underlying fiscal policy by removing the influence of cyclical factors from the budget deficit. Compare with **cyclical deficit**. (CBO)

structural deficit: Same as **standardized-employment deficit**.

supply shock: A large and unexpected change in the production of a good or service. Examples include bumper crops, crop failures, or sudden restrictions on the supply of oil as occurred in 1973-1974 and 1979-1980. A supply shock that restricts output will raise the price of the good in short supply; a surfeit will lower the price of the good.

ten-year Treasury note: Interest-bearing note issued by the U.S. Treasury that is redeemed in 10 years.

three-month Treasury bill: Security issued by the U.S. Treasury that is redeemed in 91 days.

thrift institutions: Savings and loan institutions and mutual savings banks.

total factor productivity: See **productivity**.

transfer payments: Payments in return for which no good or service is currently received--for example, welfare or Social Security payments or money sent to relatives abroad. (Bureau of Economic Analysis)

trough: See **business cycle**.

trust fund: A fund, designated as a trust fund by statute, that is credited with income from earmarked collections and charged with certain outlays. Collections may come from the public (for example, taxes or user charges) or from intrabudgetary transfers. More than 150 federal government trust funds exist, of which the largest and best known finance several major benefit programs (including Social Security and Medicare) and certain infrastructure spending (the Highway and the Airport and Airway trust funds). The term "federal funds" refers to all programs that are not trust funds.

underlying rate of inflation: Rate of inflation of a modified CPI-U that excludes from the market basket the components most volatile in price--food, energy, and used cars.

unemployment: Joblessness. The measure of unemployment is the number of jobless people who are available for work and are actively seeking jobs. The *unemployment rate* is unemployment as a percentage of the labor force. (BLS)

yield: The average annual rate of return on a security, including interest payments and repayment of principal, if held to maturity.

yield curve: The relationship formed by plotting the yields of otherwise comparable fixed-income securities against their terms of maturity. Typically, yields increase as maturities lengthen. The rate of this increase determines the "steepness" or "flatness" of the yield curve. Ordinarily a steepening (or flattening) of the yield curve is taken to suggest that relatively short-term interest rates are expected to be higher (or lower) in the future than they are now.

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